1 STATE OF MINNESOTA DISTRICT COURT 08:39:46

2 COUNTY OF RAMSEY SECOND JUDICIAL DISTRICT

3 -

4

5 THE STATE OF MINNESOTA,
BY HUBERT H. HUMPHREY, III,
6 ITS ATTORNEY GENERAL

7 AND

8 BLUE CROSS AND BLUE SHIELD OF
MINNESOTA,
9 PLAINTIFFS,
FILE NO. C1-94-8565
10
VS.
11
PHILLIP MORRIS INCORPORATED, R.J.
12 REYNOLDS TOBACCO COMPANY, BROWN &
WILLIAMSON TOBACCO CORPORATION,
13 B.A.T. INDUSTRIES P.L.C., LORILLARD
TOBACCO COMPANY, THE AMERICAN
14 TOBACCO COMPANY, LIGGETT GROUP, INC.,
THE COUNCIL FOR TOBACCO RESEARCH-U.S.A.,
15 INC., AND THE TOBACCO INSTITUTE, INC.,
DEFENDANTS.
16 -

17

18 VOLUME II

19 DEPOSITION OF

20 RICHARD HURT, M.D.

21 August 20, 1997

22 8:40 a.m.

23

24 REPORTED BY: KATHY L. SOPER
RPR, CSR, CALIF. CSR 8519
25 620 PLYMOUTH BUILDING
MINNEAPOLIS, MINNESOTA 55402

1 DEPOSITION OF RICHARD HURT, M.D.,

http://legacy.library.ucsf.edu/tid/uqm35a00/pdf
Source: https://www.industrydocuments.ucsf.edu/docs/rzhd0001

2 VOLUME II, taken at the Law Offices of Robins,

3 Kaplan, Miller & Ciresi, 2800 LaSalle Plaza,

4 Minneapolis, Minnesota 55402, commencing at 8:40

5 a.m., on the 20th day of August, 1997, before Kathy

6 L. Soper, a Notary Public and Certified Professional

7 Reporter.

8 * * * *

9 A P P E A R A N C E S

10 On Behalf of the Plaintiffs:

11
Robins, Kaplan, Miller & Ciresi
12 2800 LaSalle Plaza
800 LaSalle Avenue
13 Minneapolis, Minnesota 55402

14 BY: Roberta B. Walburn
Gary L. Wilson
15
On Behalf of Philip Morris Incorporated:
16
Arnold & Porter
17 555 Twelfth Street, N.W.
Washington, D.C. 20004-1202
18
BY: Alfred T. McDonnell
19
On Behalf of R.J. Reynolds Tobacco Company:
20
Jones, Day, Reavis & Pogue
21 1900 Huntington Center
Columbus, Ohio 43215
22
BY: Michael A. Nims
23

24

25

1 Gray, Plant, Mooty, Mooty & Bennett
3400 City Center
2 33 South Sixth Street
Minneapolis, Minnesota 55402-3796
3
BY: Thomas Darling

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4 Gretchen August

5 On Behalf of Brown & Williamson Tobacco Corporation:

6 Kirkland & Ellis
200 East Randolph Drive
7 Chicago, IL 60601

8 BY: Todd A. Gale

9 On Behalf of Lorillard Tobacco Company:

10 Shook, Hardy & Bacon
One Kansas City Place
11 1200 Main Street
Kansas City, Missouri 64105
12
BY: Arvids Petersons
13 Donald Kemna

14 On Behalf of The Council for Tobacco
Research-U.S.A., Inc.:
15
Maslon, Edelman, Borman & Brand
16 300 Norwest Center
90 South Seventh Street
17 Minneapolis, Minnesota 55402

18 BY: Lawrence P. Purdy

19
On Behalf of B.A.T Co. And Batuke Tobacco Co.:
20
Chadbourne & Parke, LLP
21 30 Rockefeller Plaza
New York, New York 101112
22
By: Gregory M. Loss
23

24

25

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1 On Behalf of the witness:

2 Kelly & Berens, P.A.
3720 IDS Center
3 Minneapolis, MN 55402

4 BY: Michael Berens

5 ALSO PRESENT: John Ramonetti
Legal Assistant
6 Chadbourne & Parke, LLP

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VIDEOGRAPHER: We are back on the video record. This is the fifth tape in the videotaped deposition of Dr. Richard Hurt. The time is now 8:40 a.m. 08:40:38 08:40:40 08:40:44 08:40:46

RICHARD HURT, M.D.,

called as a witness, was previously sworn and testified as follows:

EXAMINATION 08:40:46

BY MR. GALE:

Q. Good morning, Dr. Hurt. 08:40:48

A. Good morning. 08:40:50

http://legacy.library.ucsf.edu/tid/uqm35a00/pdf Source: https://www.industrydocuments.ucsf.edu/docs/rzhd0001

14 Q. I introduced myself to you a few minutes ago. My 08:40:52
15 name is Todd Gale and I represent Brown & Williamson 08:40:54
16 in this litigation. 08:40:56
17 This is the second day of your 08:40:58
18 deposition. You understand that you are still under 08:40:58
19 oath? 08:41:00
20 A. I do. 08:41:00
21 Q. Was yesterday the first time you have ever had your 08:41:02
22 deposition taken? 08:41:04
23 A. For this case? 08:41:06
24 Q. No, sir, just ever. 08:41:08
25 A. Ever? I had a deposition, as I recall, back, oh, 08:41:12

1 must be 12 years or so ago when I first went on the 08:41:16
2 staff at the Mayo Clinic, but it had to do with a 08:41:18
3 patient deal. I have never been deposed in 08:41:22
4 something like this before. 08:41:24
5 Q. Okay. So yesterday was the first time in 12 years 08:41:26
6 you had been deposed? 08:41:28
7 A. Well, in some years. I can't really recall when 08:41:30
8 this other deposition was. It's been a long time 08:41:34
9 ago. 08:41:34
10 Q. Okay. 08:41:34
11 A. They didn't have all these things then, for sure, 08:41:40
12 they didn't have the computer setup that she has. 08:41:42
13 Whenever that began. I am not sure. 08:41:46
14 Q. I am going to ask you a series of questions to try 08:41:48
15 to understand your opinions and the basis for your 08:41:50
16 opinions. 08:41:50

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17 I am going to ask for you to please focus 08:41:54
18 specifically on the questions that I ask and try to 08:41:54
19 answer those specific questions because that's the 08:41:58
20 information I am looking for. 08:42:00
21 Can you help me with that? 08:42:00
22 A. I will try to remain as focused as I can. 08:42:02
23 Q. Thank you, sir. I appreciate that. 08:42:04
24 Dr. Hurt, do you recognize Jack 08:42:10
25 Henningfield as a leading authority in the field of 08:42:12

1 nicotine pharmacology? 08:42:14
2 MS. WALBURN: Objection, form. 08:42:16
3 THE WITNESS: Jack Henningfield is an 08:42:18
4 expert in nicotine addiction, that is correct. 08:42:24
5 BY MR. GALE:
6 Q. Do you also consider him an expert in nicotine 08:42:26
7 pharmacology, specifically? 08:42:28
8 A. Yes, he is an expert in the field of nicotine 08:42:34
9 addiction, and nicotine pharmacology is part of 08:42:36
10 that, and as we kind of talked yesterday, you have 08:42:38
11 to have some expertise in that area in order to deal 08:42:42
12 with this as a drug dependence. 08:42:46
13 Q. Do you also consider Dr. Henningfield an expert in 08:42:48
14 the field of smoker behavior? 08:42:50
15 A. Oh, I would have to go through and look at -- he is 08:42:54
16 an expert in nicotine dependence, would be what I 08:42:58
17 would say. 08:42:58
18 And, I mean, if you separate out the 08:43:00

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19 different parts of it, there are people that have 08:43:04
20 more knowledge in one area than another, but in the 08:43:06
21 broadest sense, he is an expert in nicotine 08:43:08
22 addiction. 08:43:10
23 Q. Do you recognize Dr. John Hughes as an expert in 08:43:12
24 nicotine dependence? 08:43:14
25 A. John Hughes is a psychiatrist who has a longstanding 08:43:18

1 record, public record, of nicotine dependence, 08:43:22
2 nicotine addiction work, and he is an expert in 08:43:24
3 addiction. 08:43:24
4 Q. Are you familiar with the publications of Dr. Hughes 08:43:26
5 on the subject? 08:43:28
6 MS. WALBURN: Objection, form. 08:43:28
7 THE WITNESS: I have read some 08:43:30
8 publications, but, you know, he has written a lot of 08:43:34
9 stuff. 08:43:34
10 As we talked yesterday, you know, it's a 08:43:36
11 matter of large amounts of data that these people -- 08:43:40
12 Henningfield has written a lot of articles, as 08:43:42
13 well. 08:43:44
14 So it's -- I know of those, but having 08:43:46
15 detailed knowledge of each individual one, probably 08:43:50
16 not, but I have knowledge of his work. 08:43:54
17 BY MR. GALE:
18 Q. Do you recognize Dr. Jed Rose as an expert in 08:43:56
19 nicotine addiction? 08:43:58
20 A. I think he is really actually more focused in 08:44:00
21 nicotine delivery systems. I think he proclaims to 08:44:06

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22 be the inventor of the nicotine patch. 08:44:10

23 I think he has a little more focus than 08:44:12

24 kind of the broader range of activities, say, that 08:44:16

25 John Hughes has had, but I think he would be thought 08:44:20

1 of as someone that has a lot of knowledge about 08:44:22

2 nicotine addiction. 08:44:22

3 Q. Do you recognize Dr. Jed Rose as an expert in the 08:44:26

4 role of nicotine and smoking behavior? 08:44:30

5 MS. WALBURN: Objection, form. 08:44:32

6 THE WITNESS: Well, I mean, the role of 08:44:38

7 nicotine and smoking behavior is very, very broad, 08:44:40

8 and so -- I mean, which role are you talking about, 08:44:44

9 the role of how it's administered, how rapidly it 08:44:48

10 gets in? I mean, the role of nicotine and smoking 08:44:50

11 behavior is not a simple deal. 08:44:52

12 BY MR. GALE:

13 Q. Let me try to clarify the question for you. 08:44:54

14 Are you familiar with Dr. Rose's work that 08:44:58

15 compares the role of nicotine as opposed to 08:45:02

16 non-nicotine factors as determinants of smoking 08:45:06

17 behavior? 08:45:06

18 MS. WALBURN: Objection, form. 08:45:08

19 THE WITNESS: I have seen a lot of Jed 08:45:10

20 Rose's work, but I couldn't tell you that specific 08:45:12

21 article. If you got it, we can talk about it. 08:45:18

22 BY MR. GALE:

23 Q. Well, there are actually a number of them, and 08:45:18

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24 that's why I wanted to ask about them in a 08:45:20
25 category. 08:45:20

1 Have you read Dr. Rose's work that 08:45:22
2 compares the role of nicotine as opposed to 08:45:26
3 non-nicotine factors in smoking behavior? 08:45:30
4 MS. WALBURN: Objection, form, asked and 08:45:32
5 answered. 08:45:32
6 THE WITNESS: I have read a lot of 08:45:34
7 articles over the years and I have read articles 08:45:34
8 written by Jed Rose, Henningfield, Benowitz and all 08:45:38
9 the ones you have mentioned. 08:45:40
10 So I have read them, but which specific 08:45:42
11 ones you are talking about, I couldn't tell you 08:45:44
12 right off the top of my head. 08:45:46
13 BY MR. GALE:
14 Q. Have you read articles written by Alan Armitage, a 08:45:50
15 British researcher, on nicotine pharmacology? And 08:45:54
16 if it helps you place it in time, he was quite 08:45:56
17 active writing in the 1960s and 1970s. 08:46:00
18 A. I have had -- I have seen reference to that work, 08:46:04
19 and I probably have read some, but, you know, my 08:46:10
20 work in this area spans 20 years and you are asking 08:46:12
21 me things about reading articles that were part of 08:46:20
22 that repertoire, but -- the name is familiar, but 08:46:24
23 which articles you are talking about -- 08:46:26
24 Q. To prepare yourself to testify in this case, have 08:46:28
25 you reviewed, specifically, published literature on 08:46:34

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the issues of nicotine pharmacology or smoker behavior? 08:46:36 08:46:38

MS. WALBURN: Objection, form. 08:46:40

THE WITNESS: What I have reviewed is really outlined in my expert report, and attached to it is a very comprehensive bibliography of the things that I reviewed in preparation of the expert report, which relies upon my experience as a physician, my experience as a person that treats people with nicotine dependence, my experience with nicotine research, my experience with review of the documents that have been provided, which are basically just a sample of -- in the report, just a sample of the ones that I reviewed and continue to review, so it's more than just that, but what I have done is outlined in my expert report. 08:46:42 08:46:44 08:46:48 08:46:52 08:46:54 08:46:56 08:46:58 08:47:00 08:47:04 08:47:08 08:47:12 08:47:14 08:47:16

BY MR. GALE:

Q. I know there is an attachment to your expert report that lists published articles that you reviewed and rely upon for your testimony. 08:47:20 08:47:22 08:47:24

Is that what you were just referring to in your answer in terms of the published literature? 08:47:26 08:47:28

A. I think that's what the report says, is these are the -- attached are the things that I reviewed in preparation for this report. 08:47:32 08:47:34 08:47:36

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1 Q. Did you do any review of documents from the 08:47:38
2 published literature beyond what is listed in that 08:47:44
3 attachment to your expert report in order to prepare 08:47:46
4 yourself to testify in this case? 08:47:48
5 MS. WALBURN: Objection, form, asked and 08:47:50
6 answered. 08:47:50
7 THE WITNESS: What I reviewed is listed in 08:47:52
8 this report, and as I go through my daily work, 08:47:58
9 which is about 50 or maybe more percent nicotine 08:48:02
10 dependence work, I read stuff every day that has to 08:48:06
11 do with nicotine addiction and the health effects of 08:48:10
12 smoking on my patients, as well as nicotine 08:48:14
13 addiction, in general. 08:48:16
14 And so I continue to read things just as 08:48:18
15 part of my professional education. But what I did 08:48:24
16 for this report and for this deposition is listed in 08:48:28
17 the report these are the literature that I reviewed 08:48:30
18 in preparation for this, which includes those 08:48:34
19 things, as well as the documents, as well as my 08:48:36
20 experience, as well as my training. 08:48:38
21 BY MR. GALE:
22 Q. Do you recognize Dr. Jerome Jaffe as an expert in 08:48:42
23 the field of addiction? 08:48:44
24 A. Yes. He has been an expert -- recognized as an 08:48:46
25 expert by many people for a very, very long period 08:48:50

1 of time. He is one of the -- kind of the pioneers, 08:48:52
2 if you will. 08:48:54

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3 Q. There was some discussion yesterday about Dr. Neil 08:48:56
4 Benowitz. 08:48:56
5 Do you recall that discussion? 08:48:58
6 A. I do. 08:49:00
7 Q. Have you read any deposition testimony given by 08:49:02
8 Dr. Benowitz in any case? 08:49:04
9 A. I have, in part of this process. I have reviewed a 08:49:08
10 deposition; I couldn't tell you which deposition it 08:49:14
11 was, I just had the document and I reviewed it 08:49:16
12 briefly. I didn't really spend very much time on 08:49:18
13 it. 08:49:20
14 There was one, I think, but I -- I 08:49:22
15 remember seeing his name in a question and answer 08:49:26
16 sort of format, much like what we are doing today. 08:49:28
17 Q. Okay. The deposition that you saw, was it a single 08:49:32
18 volume of deposition taken on one day or was it 08:49:34
19 depositions taken over more than one day, if you 08:49:38
20 know? 08:49:38
21 A. Beats me. I mean, I just barely remember seeing the 08:49:42
22 document. I mean, what I reviewed here in this 08:49:46
23 little book is just a partial -- you have got the 08:49:48
24 listing of all the documents that I reviewed, and 08:49:52
25 that's just one of them that was there at one point 08:49:54

1 and I looked at it and went on to the next thing. 08:49:58
2 MR. GALE: Counsel, I guess this is 08:50:00
3 probably more directed to you than at the witness. 08:50:02
4 I don't believe that in the disclosures that we 08:50:04

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5 received regarding Dr. Hurt any deposition testimony 08:50:06
6 of Neil Benowitz was listed as anything the doctor 08:50:10
7 had reviewed. 08:50:10
8 If there is a way to identify for me what 08:50:12
9 deposition testimony of Dr. Benowitz was reviewed, I 08:50:14
10 would appreciate it. 08:50:16
11 And, in fact, if you can just tell me what 08:50:18
12 it was now, that would be helpful. 08:50:20
13 MS. WALBURN: I don't know as I sit here. 08:50:22
14 I am not sure that you are entitled to everything 08:50:24
15 that expert witnesses have reviewed as opposed to 08:50:32
16 relied upon. 08:50:32
17 MR. GALE: Well, let me just ask you a 08:50:34
18 straight question. Will you provide that to me? 08:50:36
19 MS. WALBURN: Well, are the defendants 08:50:36
20 prepared to provide us everything that their expert 08:50:38
21 witnesses have reviewed? 08:50:38
22 Again, if you want to sit down and reach a 08:50:40
23 bilateral agreement on that, we are happy to do 08:50:42
24 that. 08:50:44
25 MR. GALE: Okay. But short of that and me 08:50:46

1 making that commitment now for every defendant in 08:50:48
2 this lawsuit, you won't let me know what deposition 08:50:50
3 testimony of Neil Benowitz was reviewed by 08:50:52
4 Dr. Hurt? 08:50:52
5 MS. WALBURN: I will take your request 08:50:54
6 under advisement. 08:50:56
7 MR. GALE: Okay. Well, since I am talking 08:50:58

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8 to him now and since I have a limited time period, 08:50:58
9 do you have any idea when you might get back to me? 08:51:02
10 MS. WALBURN: Well, you should give some 08:51:04
11 thought to a bilateral agreement at a break, as 08:51:06
12 well, and maybe we can move this along. 08:51:08
13 MR. LOSS: I suggest we move on. 08:51:14
14 BY MR. GALE:
15 Q. Doctor, among the materials listed that you did 08:51:16
16 review, were certain chapters of a text and 08:51:22
17 supplements to that text written by Larson, Haag & 08:51:26
18 Silvette. 08:51:26
19 Are you familiar with that work? 08:51:26
20 MS. WALBURN: Objection, form. 08:51:30
21 THE WITNESS: As listed in the 08:51:32
22 bibliography that's attached, there are fairly 08:51:40
23 sizeable volumes, actually, three that I reviewed, 08:51:48
24 you know, as you have already mentioned; they are 08:51:52
25 long, large. 08:51:54

1 That was just part of the review process 08:51:56
2 and I tried to be as comprehensive as I could in 08:52:00
3 listing those things. 08:52:02
4 BY MR. GALE:
5 Q. Okay. Do you recognize those portions of Larson, 08:52:04
6 Haag & Silvette that you listed as an attachment to 08:52:08
7 your expert report to be authoritative in the area 08:52:10
8 of nicotine pharmacology? 08:52:12
9 A. Those are old documents. I have forgotten the date 08:52:18

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10 on them. 1971. Those are 1968, 1971, 1971. They 08:52:26
11 probably are more of historical interest. There are 08:52:32
12 probably principles that are there that have carried 08:52:34
13 through and have withstood the test of time in 08:52:40
14 science, but there probably are many parts that have 08:52:44
15 not. 08:52:44
16 Medicine continues to advance. As I said 08:52:48
17 yesterday, what we used to treat -- used for 08:52:50
18 treatment of rheumatoid arthritis in the '70s is 08:52:54
19 very different than what we use to treat rheumatoid 08:52:58
20 arthritis today. 08:52:58
21 Q. Okay.
22 A. What we used to treat nicotine dependence in the 08:53:02
23 1997 year is very different than what we knew about 08:53:04
24 that in the 1970s. 08:53:06
25 Q. Do you believe that the Larson, Haag & Silvette text 08:53:10

1 was authoritative regarding the state of knowledge 08:53:16
2 regarding nicotine pharmacology at the time they 08:53:20
3 were written? 08:53:20
4 A. Authoritative in what sense? I mean, I -- I -- 08:53:26
5 Q. To the extent that the Larson, Haag & Silvette text 08:53:30
6 reaches conclusions regarding the state of 08:53:32
7 knowledge, do you believe them to be correct as of 08:53:34
8 the time they were written? 08:53:36
9 A. They were very comprehensive, as far as what they 08:53:42
10 wrote. Not having been really involved in this 08:53:46
11 field in 1970 and '71, and still being a smoker, I 08:53:56
12 probably wouldn't have picked one of those up to 08:53:58

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13 read it. 08:54:00

14 And so I am not really sure I can say 08:54:02

15 within that context did I know at that time in 1971 08:54:06

16 if that was viewed as authoritative, or not. 08:54:10

17 And, in fact, I haven't seen subsequent -- 08:54:12

18 I have seen subsequent references to those volumes, 08:54:18

19 but I am not sure I have seen those -- those words, 08:54:22

20 these were the authoritative voices of that time. 08:54:28

21 They are very comprehensive, they are very long, 08:54:30

22 very detailed, very comprehensive. 08:54:32

23 Q. In your testimony in this case do you plan to 08:54:36

24 compare internal industry documents to the state of 08:54:38

25 public scientific knowledge at any given point in 08:54:42

1 time? 08:54:42

2 MS. WALBURN: Objection, asked and 08:54:44

3 answered, at least in part, yesterday. 08:54:46

4 THE WITNESS: I actually have already done 08:54:48

5 that in comparison to what was generally known in 08:54:52

6 the scientific world, not necessarily just the 08:54:56

7 scientific literature, but what was clearly 08:54:58

8 understood or understood within the scientific 08:55:02

9 realm, and probably more importantly, what was 08:55:04

10 understood in the medical realm, because that's -- 08:55:06

11 that's where the -- that's where the rubber meets 08:55:10

12 the road with this issue because nicotine 08:55:12

13 dependence, though it may be important to people 08:55:14

14 dealing with nicotine pharmacology, like your 08:55:16

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15 client, but to the medical world, it was really more 08:55:20
16 important what it was doing to the patient. 08:55:22
17 So what was known in the public world 08:55:24
18 versus what was known in the internal documents is 08:55:28
19 important from a variety of standpoints, which 08:55:30
20 includes the one you just mentioned, but it's much 08:55:32
21 broader than that. 08:55:34
22 BY MR. GALE:
23 Q. How was it determined what internal company 08:55:36
24 documents you would review? 08:55:38
25 MS. WALBURN: Objection, form. 08:55:42

1 THE WITNESS: It was a process. When we 08:55:46
2 went -- when we began to discuss my participation, I 08:55:54
3 said these are the kind of things that I would like 08:55:56
4 to see as you go through the review of the 08:55:58
5 documents, mainly focused on addiction, 08:56:00
6 pharmacology, the things that are, basically, in my 08:56:04
7 expert report; those are the kind of things that I 08:56:06
8 wanted to see because that's my area of expertise. 08:56:16
9 BY MR. GALE:
10 Q. For what purpose did you want to review the internal 08:56:18
11 company documents? 08:56:18
12 A. What purpose? 08:56:18
13 Q. Yes, sir. 08:56:20
14 A. I wanted to see what the industry knew and when they 08:56:20
15 knew it and what they did or did not disclose to the 08:56:24
16 public. 08:56:24
17 Q. Why? 08:56:26

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18 A. Why? 08:56:26

19 MS. WALBURN: Objection, form. 08:56:28

20 THE WITNESS: To understand as best I can 08:56:34

21 and to learn more about the problem, because I -- I 08:56:40

22 assumed from what I read in the published 08:56:42

23 literature, from the JAMA article and in the summer 08:56:48

24 I think two years ago about your company -- you are 08:56:50

25 Brown & Williamson, right? 08:56:52

1 BY MR. GALE:

2 Q. Yes, sir, I represent Brown & Williamson. 08:56:54

3 A. The Brown & Williamson papers, it was published in 08:56:56

4 the Journal of the American Medical Association, 08:56:58

5 those articles were very revealing to know some of 08:57:02

6 the things that your company knew and just didn't 08:57:04

7 bother to tell anyone else as it relates to nicotine 08:57:08

8 addiction, as it relates to the health effects that 08:57:10

9 were known by your company but they didn't bother to 08:57:14

10 tell anyone, how there was manipulation of a lot of 08:57:16

11 different things, including nicotine. So it wasn't 08:57:22

12 just idle curiosity. 08:57:24

13 I have an interest in trying to better 08:57:26

14 serve the patients that I see on a daily basis to 08:57:28

15 help them stop smoking in order to prevent 08:57:32

16 tobacco-related diseases, and so my interest was to 08:57:36

17 learn more about this and to learn when your company 08:57:40

18 knew what it knew and what they did with the 08:57:42

19 information. 08:57:42

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20 And from that peer reviewed article, or 08:57:46
21 set of articles, in that issue of JAMA, you knew a 08:57:50
22 lot that you didn't tell us. 08:57:52
23 Q. When you read the JAMA articles had you already been 08:57:58
24 in contact with lawyers from Robins, Kaplan 08:58:00
25 regarding testifying in this case? 08:58:02

1 A. I don't recall, actually. I don't know exactly when 08:58:06
2 the first contact was made. 08:58:08
3 Q. What's your best recollection of when the first 08:58:10
4 contact was between you and Robins, Kaplan? 08:58:12
5 A. I honestly don't know. It's been quite while. 08:58:16
6 Q. Has it been more than a year? 08:58:18
7 A. Oh, yeah, I think it's been more than a year. 08:58:20
8 Q. Has it been more than two years? 08:58:22
9 A. I really don't know. I mean, I don't keep logs of 08:58:26
10 those sorts of things and I don't -- I don't recall. 08:58:28
11 Q. Okay. Doctor, I am handing a document to the court 08:58:36
12 reporter to mark as the next exhibit. I believe 08:58:36
13 it's 2456. 08:58:38
14 (Defendants' Deposition Exhibit 2456 08:58:38
15 was marked for identification.)
16 BY MR. GALE:
17 Q. It's a document entitled Final Project on Project 08:58:46
18 Hippo I, and it's listed among the documents that 08:58:50
19 your counsel told us were provided to you. 08:58:52
20 A. Okay. I want to look at my -- see if I have even 08:59:18
21 seen this one. Okay. I don't think this one is in 08:59:42
22 this book; is that correct? 08:59:44

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23 Q. I don't know if it's in your notebook, or not, I 08:59:46
24 have not looked through your notebook that you have 08:59:48
25 sitting in front of you. 08:59:50

1 A. Someone has. Rather than me going through this 08:59:52
2 whole notebook to see if this is in this book, does 08:59:56
3 someone know if this is in this book? 08:59:56
4 Q. Quite candidly, for purposes of my questions, I am 09:00:00
5 not particularly concerned whether or not it's in 09:00:00
6 your book, what I need to know is what you know 09:00:04
7 about this document. 09:00:04
8 MS. WALBURN: I don't believe that it is 09:00:06
9 in your notebook at that time. 09:00:08
10 THE WITNESS: Okay. That's important 09:00:08
11 because I have reviewed these more recently than I 09:00:10
12 have this. If I saw this, it's probably been, I 09:00:14
13 don't know, a long time ago. 09:00:14
14 BY MR. GALE:
15 Q. Okay. Do you have any recollection at all regarding 09:00:16
16 the contents of this document that's been marked as 09:00:18
17 2456? 09:00:18
18 A. I remember the name of the project, because there 09:00:38
19 are references to that in other documents. It will 09:00:48
20 take me just a minute to figure this out because -- 09:01:10
21 MR. LOSS: Can we go off the record? 09:01:42
22 MS. WALBURN: No. 09:01:44
23 MR. LOSS: I am requesting that we go off 09:01:46
24 the record. 09:01:46

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25 MS. WALBURN: No, we are not going off the 09:01:48

1 record. 09:01:48
2 MR. LOSS: If the witness continues to 09:01:50
3 read the document, I think we should go off the 09:01:52
4 record, as plaintiffs have done in every other 09:01:56
5 deposition in this case. 09:01:56
6 MS. WALBURN: You are misstating the 09:01:58
7 record. The fact is that our standard procedure is 09:02:00
8 to stay on the record. There have been some 09:02:02
9 deviations from time to time on both sides of this 09:02:04
10 case. We are staying on the record. 09:02:06
11 The counsel has handed the witness a 09:02:08
12 50-page document that the witness has said he has 09:02:14
13 not read in the immediate past and the witness has a 09:02:18
14 right to look at the document, and we are staying on 09:02:22
15 the record for this. 09:02:22
16 MR. GALE: Okay. Regardless of whether we 09:02:26
17 stay on the record, since we have got the time from 09:02:26
18 the realtime transcription, can we agree that time 09:02:30
19 spent by the witness reviewing long documents will 09:02:32
20 not be counted against our 12-hour time limit? 09:02:34
21 MS. WALBURN: Absolutely not. We are -- 09:02:36
22 the standard practice in these depositions is the 09:02:38
23 time continues to tick while the witness reviews the 09:02:42
24 document, and I have read multiple depositions of 09:02:44
25 defendant employees where that is the case. 09:02:46

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So we are staying on the record and the 09:02:48
time is sticking. And if you have a way to speed up 09:02:52
this process, that's fine. 09:02:54
MR. DARLING: Ms. Walburn, I just should 09:02:56
note that my understanding is that the exact 09:03:00
opposite of what you say is true, and certainly 09:03:02
that's been my experience in the depositions I have 09:03:04
taken. 09:03:04
So for the record, there is obviously some 09:03:08
dispute among the parties on that. 09:03:10
MS. WALBURN: Well, I can tell you that in 09:03:14
the vast majority of the depositions of defendants' 09:03:16
employees the time continues to tick as the defense 09:03:18
employee or former employee reads the document, and 09:03:20
that's what we are going to do in this deposition. 09:03:22
MR. LOSS: Have you spoken with your 09:03:24
partner, Ms. Wivell? 09:03:30
MS. WALBURN: Yes, I have. 09:03:32
MR. DARLING: Well, I suggest because I am 09:03:38
keeping track of the time that counsel who is 09:03:40
examining note when they wish to go off the record, 09:03:46
as it were, so that I have a specific point on the 09:03:48
transcript, and then when we go back on the record, 09:03:54
that way at least we know what time we are talking 09:03:56
about. 09:03:56

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1 MS. WALBURN: Well, you are not the 09:03:58
2 official timekeeper and this deposition is going to 09:04:00
3 conclude today. 09:04:02
4 MR. GALE: I will do that with my 09:04:04
5 examination. 09:04:06
6 MR. DARLING: That would be great. 09:04:22
7 MS. WALBURN: And let me just state that 09:04:38
8 it is -- to the extent any counsel have an issue 09:04:42
9 with time on the record reviewing documents at 09:04:46
10 depositions, you are welcome to call me if it 09:04:48
11 becomes a problem because the standing rule that we 09:04:52
12 are trying to make sure everyone on the team follows 09:04:54
13 is that stay on the record absent extraordinary 09:04:58
14 circumstances. 09:04:58
15 If you have a problem with that, give me a 09:05:00
16 call, because that's the understanding that we are 09:05:02
17 working under. 09:05:02
18 MR. DARLING: That is not the 09:05:06
19 understanding that we have worked with in the 09:05:06
20 depositions I have taken. 09:05:08
21 THE WITNESS: I have looked this over. 09:05:22
22 And you saw I scanned it. I don't know how much 09:05:26
23 time I spent, but not very much. So I don't recall 09:05:28
24 seeing this in the recent past. 09:05:30
25 It probably has been -- I probably have 09:05:32

1 reviewed it, but I -- I have reviewed a lot of 09:05:36
2 documents, and so that's -- that's all I can say. 09:05:40
3 I would, as an aside, say that there was 09:05:44

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4 an objection by this gentleman yesterday for being 09:05:46
5 handed a two-page document and having overnight to 09:05:50
6 study it from his own company, so that's a little 09:05:54
7 bit -- 09:05:54
8 MR. GALE: I will move to strike the 09:05:58
9 comments regarding whatever was said by counsel 09:05:58
10 yesterday. 09:06:02
11 BY MR. GALE:
12 Q. Project Hippo I was a rat study; isn't that right, 09:06:04
13 Doctor?
14 A. They talk about fresh rats, yeah, I guess it was a 09:06:12
15 rat study. It doesn't say so in the title or the 09:06:16
16 summary. 09:06:16
17 I mean, you could interpret this to be a 09:06:18
18 project of hippopotami because it's named Project 09:06:22
19 Hippo. We usually name projects that are a little 09:06:24
20 more descriptive of what we are doing. I don't know 09:06:26
21 what Hippo means. Maybe there is something else 09:06:28
22 there. 09:06:30
23 But according to the first two paragraphs, 09:06:32
24 it talks about fresh rats and tolerant rats. I am 09:06:36
25 assuming it's a rat study. 09:06:38

1 Q. Okay. It was designed to test the physiological 09:06:40
2 effect of nicotine on certain bodily functions; 09:06:44
3 isn't that right? 09:06:46
4 MS. WALBURN: Objection, form. 09:06:54
5 THE WITNESS: The usual form that 09:06:56

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6 scientific studies that I deal with and do start out 09:07:00
7 with something called specific aims, and in the 09:07:02
8 specific aims it tells the reader what the aim of 09:07:06
9 this actually is. And then -- 09:07:10
10 BY MR. GALE:
11 Q. Do you see anything like that in that document in 09:07:12
12 front of you? 09:07:12
13 A. Not yet. 09:07:12
14 Q. In that respect -- 09:07:14
15 A. There is a summary, and then there is an 09:07:16
16 introduction, and the introduction begins "It is an 09:07:20
17 everyday experience to each smoker that smoking a 09:07:22
18 cigarette helps master the numerous stressful 09:07:26
19 stimuli of modern life." 09:07:28
20 It doesn't say anything about rats, it 09:07:30
21 doesn't say anything about what you just mentioned. 09:07:32
22 So for me as a person who would review this as a 09:07:34
23 scientific piece of work, we usually start out with 09:07:36
24 specific aims and then methods, and so on. 09:07:40
25 And this form and this format is very 09:07:44

1 different than what's done in the world of the 09:07:48
2 National Institutes of Health, for example, so I 09:07:52
3 would have to go through this in more detail in 09:07:56
4 order to answer your question. I haven't read this 09:07:58
5 for detail, and I would be glad to do it. 09:08:00
6 Q. Without taking the time to read the document in more 09:08:02
7 detail, can you tell me whether or not it was 09:08:06
8 designed to test the physiological effects of 09:08:10

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9 nicotine? 09:08:10

10 MS. WALBURN: Well, I am going to object 09:08:14

11 to the form of the question and asked and answered. 09:08:16

12 THE WITNESS: Without taking the time to 09:08:18

13 read this and to understand it, I really can't tell 09:08:22

14 you that answer because there is a lot of things 09:08:26

15 mentioned here, and there is not a clear stated 09:08:28

16 purpose of the study in the way that I am usually 09:08:32

17 used to seeing that. 09:08:34

18 That's what makes these documents so hard 09:08:36

19 is because it was written a long time ago and it's 09:08:40

20 very different than what I am used to seeing. 09:08:42

21 BY MR. GALE:

22 Q. Okay. Have you, at any point in time, made any 09:08:44

23 attempt to compare the results of Project Hippo I to 09:08:50

24 the contemporaneous scientific literature? 09:08:54

25 A. Not having -- you are hearing me say I can't really 09:09:06

1 recall having seen this for detail, and I do not 09:09:10

2 recall having compared that to other things that 09:09:14

3 were occurring in 1962, which is when this was 09:09:22

4 written. 09:09:22

5 Q. Okay. Can you identify, then, today, without 09:09:26

6 rereading Project Hippo I in detail while we sit and 09:09:32

7 wait, any scientific conclusion or result that was 09:09:34

8 reached in Project Hippo I that was unavailable in 09:09:38

9 this published scientific literature at the time? 09:09:42

10 MS. WALBURN: Well, I am going to object 09:09:44

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11 to the form of the question. 09:09:46

12 THE WITNESS: Without reading this 09:09:48

13 document in detail and without reading the 09:09:50

14 contemporary literature at that time, and taking the 09:09:58

15 time to do that, there is no way in the world I 09:10:00

16 could compare this. 09:10:02

17 A lot of stuff was written, a lot of 09:10:04

18 documents, a lot of things that were written. 09:10:06

19 BY MR. GALE:

20 Q. Okay. I am going to hand you two more exhibits. 09:10:12

21 They will be marked as 2457 and 2458. 09:10:16

22 (Defendants Deposition Exhibit 2457 and 2458 09:10:20

23 were marked for identification.) 09:11:14

24 BY MR. GALE:

25 Q. These documents are entitled Report Number 1 09:11:18

1 regarding Project Hippo II and Final Report on 09:11:20

2 Project Hippo II. 09:11:22

3 Doctor, before you take the time to read 09:11:24

4 those in detail, let me ask you, when is the last 09:11:28

5 time you did read those documents in detail? 09:11:30

6 MS. WALBURN: Objection, form. 09:11:34

7 THE WITNESS: These documents? 09:11:38

8 BY MR. GALE:

9 Q. Yes, sir. 09:11:38

10 A. I haven't even begun to look at them yet to know 09:11:42

11 that I even recognize them, so -- 09:11:44

12 Q. Please take a moment to look through them and then 09:11:48

13 answer my question. 09:11:50

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14 A. I can't just say those things like that. Are these 09:11:52
15 in my book, do you know? Are these in here? 09:11:54
16 MR. WILSON: I don't think so. 09:11:58
17 MS. WALBURN: I don't believe so. 09:11:58
18 MR. GALE: At this point I would request 09:12:46
19 to go off the record. I recognize that you are 09:12:48
20 going to deny that request, but I just want to keep 09:12:50
21 the record clear. 09:12:50
22 MS. WALBURN: Well, you know, we 09:12:54
23 absolutely deny the request and if you had wanted to 09:12:56
24 focus on particular documents, I would advise you 09:12:56
25 that a more proper focus predesignation would have 09:13:00

1 been helpful. 09:13:00
2 MR. GALE: We predesignated what he had 09:13:02
3 reviewed. 09:13:02
4 MS. WALBURN: Well, that's a very broad 09:13:06
5 predesignation. That's exactly my point. 09:13:08
6 THE WITNESS: So what was the question? 09:14:08
7 BY MR. GALE:
8 Q. When was the last time you read those documents in 09:14:10
9 detail? 09:14:10
10 A. I have reviewed documents, large numbers, and some I 09:14:18
11 may have read just briefly, some I have read with 09:14:24
12 more detail. 09:14:24
13 And I don't recall when I saw these 09:14:28
14 documents. I remember the project, both Hippo I and 09:14:32
15 Hippo II, but it's -- you know, there is a lot of 09:14:36

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16 documents that I have reviewed. 09:14:38

17 Specifically for detail, when you go 09:14:42

18 through this process, you review them, read them, 09:14:44

19 and sometimes you have to go back to them, like I 09:14:48

20 did yesterday, and it's amazing what you see the 09:14:50

21 second time you look at them compared to the first 09:14:54

22 time, so review and detail are really different 09:14:56

23 things. 09:14:56

24 Q. At any time have you made any attempt to compare the 09:15:02

25 scientific results in Project Hippo II to the 09:15:06

1 published scientific literature available at the 09:15:12

2 time Project Hippo II was conducted? 09:15:14

3 A. I think the same answer is the one I gave you 09:15:18

4 earlier about the other project. No, I have not 09:15:20

5 made any comparative analysis between what's written 09:15:24

6 here and what was in any other part of the 09:15:28

7 scientific literature. 09:15:30

8 Q. Okay. Doctor, I am handing to the court reporter 09:15:36

9 the next exhibit to be marked. It will be Number 09:15:38

10 2459. 09:15:40

11 (Defendants' Deposition Exhibit 2459 09:15:40

12 was marked for identification.) 09:16:16

13 BY MR. GALE:

14 Q. Okay. Doctor, at any point in time have you made 09:16:20

15 any attempt to compare the scientific results and 09:16:26

16 the fate of nicotine in the body, which is Exhibit 09:16:30

17 2459, to the published scientific literature 09:16:32

18 available at the time this document was written? 09:16:42

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19 I note the witness is starting to review 09:16:44
20 the document. I request to go off the record at 09:16:46
21 this time so that the record is clear. 09:16:48
22 MS. WALBURN: Yeah, well, you can think 09:16:50
23 about a time we can call the judge today because 09:16:52
24 this is gettingly ridiculous. 09:16:56
25 MR. GALE: We can call him at any time you 09:16:56

1 would like, it really doesn't matter.
2 MS. WALBURN: When we get to the 12-hour
3 point, that's when we're calling him.
4 MR. LOSS: I would request that Marty 09:16:58
5 Wivell be present on the conference call if she is 09:17:02
6 available. 09:17:26
7 THE WITNESS: This is just a little more 09:18:42
8 dense than these others. Those others have less 09:18:44
9 text. 09:18:46
10 BY MR. GALE:
11 Q. Do you have my question in mind, Doctor? 09:18:48
12 A. I am trying, yeah. 09:18:50
13 MS. WALBURN: And the record will reflect 09:19:20
14 this is another lengthy document of more than 55 09:19:24
15 pages and that this document was not specifically 09:19:52
16 predesignated. 09:19:54
17 MR. GALE: Of course, I disagree with 09:19:56
18 that. 09:19:56
19 THE WITNESS: So what's the question? 09:24:22
20 MR. GALE: Could you read it back to the 09:24:24

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21 doctor, please. 09:24:24

22 (The record was read by the court

23 reporter.)

24 THE WITNESS: To date, I have not done 09:24:52

25 that, but there is one part of this that is in 09:24:54

1 conflict with other internal documents with regard 09:24:58

2 to tolerance and addiction, and that would be an 09:25:00

3 area that I would like to look at and review with 09:25:02

4 other internal documents, as well as the peer 09:25:06

5 reviewed literature at that time. 09:25:08

6 So this review is ongoing from my 09:25:10

7 perspective. I have not done that as yet, but after 09:25:14

8 reading this in a little more detail, there are some 09:25:16

9 areas here that are in direct conflict with the 09:25:18

10 documents we talked about yesterday which talk about 09:25:22

11 tolerance and addiction in this same time frame, the 09:25:32

12 early '60s. 09:25:40

13 BY MR. GALE:

14 Q. Doctor, is it your opinion that these reports that 09:25:48

15 we have talked about so far this morning, Project 09:25:50

16 Hippo I, Hippo II, The Fate of Nicotine in the Body, 09:25:54

17 should have been provided to the Surgeon General's 09:25:56

18 Advisory Committee when they were preparing the 1964 09:26:00

19 Surgeon General's Report? 09:26:02

20 A. If the agreement with the companies was that they 09:26:08

21 would provide the Surgeon General's office or the 09:26:10

22 committee with reports about research, internal 09:26:14

23 research that they had done on nicotine, these would 09:26:18

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24 have been helpful to them, and for all I know, they 09:26:22
25 may have provided them to them. 09:26:22

1 Q. You say if that was the agreement. Do you know what 09:26:26
2 the agreement was between the industry and the 09:26:28
3 Surgeon General's Advisory Committee? 09:26:28
4 A. All I know is what's written in the Surgeon 09:26:32
5 General's report from '64, which states that, that 09:26:36
6 there was agreement to provide information to the -- 09:26:42
7 to the Surgeon General's committee. And -- 09:26:46
8 Q. Are you aware of any consideration by B.A.T. Co. 09:26:52
9 regarding whether the Battelle work should be 09:26:58
10 provided to the Surgeon General's Advisory 09:27:02
11 Committee? 09:27:02
12 MS. WALBURN: Objection, form. 09:27:04
13 THE WITNESS: I need just one second, 09:27:08
14 here. I am trying to collect my thoughts, and I 09:27:12
15 will have to have you go back and redo the 09:27:14
16 question. 09:27:16
17 Now, what was the question again? 09:27:30
18 MR. GALE: Could you please read it back. 09:27:32
19 (The record was read by the court
20 reporter.)
21 MS. WALBURN: Objection, form. 09:27:46
22 THE WITNESS: Can you be more specific? 09:27:48
23 BY MR. GALE:
24 Q. Are you -- have you seen any documents regarding any 09:27:50
25 consideration at B.A.T. Co. as to whether the 09:27:54

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1 Battelle work should be provided to the Surgeon 09:27:56
2 General's Advisory Committee? 09:27:58
3 MS. WALBURN: Objection, form, and I am 09:28:00
4 not sure how you are using the word "consideration," 09:28:04
5 Counsel. 09:28:04
6 THE WITNESS: There is one document that I 09:28:10
7 am aware of that has to do with that. 09:28:12
8 BY MR. GALE:
9 Q. Which document is that? 09:28:14
10 A. 689033420. 09:28:16
11 Q. I don't have the numbers memorized. Can you read 09:28:20
12 the title of it for me. 09:28:22
13 A. I will read the whole thing. 09:28:24
14 Q. I would rather not have you read the whole thing. 09:28:26
15 A. This is a letter from someone to Mr. Yeaman (ph) 09:28:28
16 at -- I am assuming he was at Brown & Williamson, 09:28:32
17 and this is from British-American Tobacco Company 09:28:36
18 dated 4 -- ironically, 4th of July, 1963. 09:28:40
19 It's referencing the letter from Charles 09:28:42
20 Ellis, "TRC Consultants scientists advise it is too 09:28:48
21 early to submit Battelle reports to Surgeon 09:28:50
22 General's committee, but we think they will agree 09:28:50
23 that continuation by Battelle of this work would be 09:28:54
24 useful. 09:28:54
25 "Charles Ellis convinced of beneficial 09:28:56

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1 effects of nicotine but agrees further investigation 09:28:58
2 desirable before publication. Must inform TIRC." 09:29:04
3 That's the letter from the beginning of 09:29:08
4 this. And then it says -- and the letter is signed 09:29:10
5 Terry -- or Tony, I guess. 09:29:12
6 "Charles's view is that as the situation 09:29:16
7 has now developed, it would be wiser for B & W not 09:29:22
8 to take the initiative in submitting anything to the 09:29:26
9 Surgeon General's committee but rather wait and hope 09:29:30
10 that the committee will ask the individual 09:29:34
11 manufacturers for further details of the research 09:29:40
12 work and then should this happen, it would give 09:29:42
13 B & W the opportunity of submitting the Battelle 09:29:46
14 work and the work on the Avalon filter." 09:29:50
15 And so what that says to me is that 09:29:52
16 someone had thought about this, and I think that 09:29:54
17 these are pretty high level people. And Mr. Yeaman 09:29:58
18 was the lead counsel for the company you are 09:30:02
19 representing, as I remember. 09:30:04
20 And what this says to me is that they 09:30:06
21 talked about it, they thought about it and they 09:30:08
22 decided consciously not to do that, but -- and not 09:30:12
23 to submit anything, but to wait and see if anybody 09:30:16
24 requested it, and if they did, then they could make 09:30:18
25 some hay with that. 09:30:20

1 So that's kind of my interpretation of 09:30:22

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2 this letter, which was written in 1963. That's the 09:30:26
3 only document that I am aware of. 09:30:28
4 Q. Okay. I want to focus on something in the middle of 09:30:32
5 your answer. 09:30:32
6 There is a statement in that letter that 09:30:34
7 you said that said "Charles Ellis convinced of 09:30:38
8 beneficial effects of nicotine but agrees more 09:30:40
9 investigation desirable before publication." 09:30:42
10 Do you see where I am? 09:30:44
11 A. "But agrees further investigation desirable before 09:30:46
12 publication. Must inform TIRC." 09:30:48
13 Q. Okay. I stand corrected on "further" as opposed to 09:30:52
14 "more." 09:30:52
15 Do you have any basis upon which to 09:30:56
16 disagree with the judgment of Sir Charles Ellis as 09:31:00
17 put in that statement? 09:31:02
18 MS. WALBURN: Objection, form. 09:31:04
19 THE WITNESS: Depending upon what the 09:31:10
20 agreement was between the companies and the Surgeon 09:31:12
21 General's committee, it would -- that would be what 09:31:16
22 would determine whether or not this was correct, or 09:31:18
23 not. 09:31:20
24 But the most important part is the 09:31:22
25 conclusion, not what Charles Ellis -- 09:31:24

1 BY MR. GALE:
2 Q. I don't mean to interrupt, but --
3 A. -- said, but what was concluded by the writer of 09:31:28
4 this letter, which said they agreed to withhold all 09:31:32

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5 information, not submit anything. 09:31:34

6 BY MR. GALE:

7 Q. And I am not asking what was concluded by the writer 09:31:36

8 of this letter. That's why I tried to ask a very 09:31:38

9 focused question about the statement referred to in 09:31:40

10 the middle. 09:31:40

11 Do you understand the statement that I am 09:31:42

12 referring to? 09:31:42

13 MS. WALBURN: Well, Counsel, please don't 09:31:46

14 interrupt Dr. Hurt when he is testifying. 09:31:48

15 MR. GALE: I really need an answer to my 09:31:50

16 question.

17 MS. WALBURN: Well, your question has been 09:31:54

18 answered -- asked and answered, and I would 09:31:56

19 appreciate if you would be able to control yourself 09:31:58

20 enough not to make gestures and eye rolling and that 09:32:00

21 sort of thing. 09:32:00

22 MR. GALE: Well, I object to your 09:32:02

23 characterization. 09:32:02

24 BY MR. GALE:

25 Q. Do you have any basis, Dr. Hurt, to disagree with 09:32:06

1 the judgment of Sir Charles Ellis, as stated in that 09:32:10

2 letter, that further investigation was desirable 09:32:12

3 before publication of the Battelle work? 09:32:16

4 MS. WALBURN: Objection, asked and 09:32:18

5 answered. 09:32:18

6 THE WITNESS: Well, actually, I think that 09:32:22

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7 in the back of the document you just gave to me on 09:32:26
8 Page 501012225 it speaks with -- talking about 09:32:34
9 publication, "This project was carried out with 09:32:42
10 specific objectives and consequently, the report 09:32:46
11 suffers somewhat when viewed as a piece of research 09:32:48
12 for publication. 09:32:50
13 "When discussing the publication merits 09:32:52
14 with Dr. Geissbuhler," G-E-I-S-S-B-U-H-L-E-R. "He 09:32:58
15 also felt the same way and made the point that he 09:33:02
16 had been staying on with Battelle. 09:33:02
17 "He would have carried out further 09:33:14
18 experiments purely to cover the situation. 09:33:16
19 Unfortunately, he will not be able to do so." 09:33:20
20 And so this person, they suggest, at least 09:33:22
21 for this report, that it probably wasn't ready for 09:33:26
22 publication purposes. However -- 09:33:30
23 Q. Do you have any basis -- 09:33:30
24 A. However, the work going on with Rand might at a 09:33:32
25 later date enable it to be drafted into two 09:33:34

1 publications; not one, but two. 09:33:38
2 So publications are works in process, as a 09:33:42
3 rule, and so at what point it's deemed by the 09:33:46
4 principal investigator that it's ready for 09:33:48
5 publication, you know, that's a judgment call, but 09:33:52
6 at least -- I do not know who wrote this report on 09:33:58
7 The Fate of Nicotine in the Body because it's just 09:33:58
8 an initial at the very end, but the end part of that 09:34:02
9 is at a later date enable it to be drafted into two 09:34:06

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10 publications. 09:34:06

11 So the context that you are asking me to 09:34:10

12 answer this in is in the middle of a sentence, and I 09:34:12

13 do not know what Charles Ellis -- if I had Charles 09:34:16

14 Ellis's opinion about this, and maybe you have it, 09:34:18

15 as far as another document, if he had something 09:34:20

16 written in another document like this person did, 09:34:24

17 you can kind of tell what they were thinking, but in 09:34:26

18 this I can't tell what he would base his opinion 09:34:34

19 on. 09:34:34

20 Q. Is it fair to state, then, that as you sit here 09:34:38

21 today, you do not have basis to disagree with the 09:34:42

22 judgment that the Battelle work was not yet suitable 09:34:46

23 for publication in the summer of 1963? 09:34:48

24 MS. WALBURN: Objection, asked and 09:34:50

25 answered now several times. 09:34:52

1 THE WITNESS: What I have reviewed in 09:34:54

2 these documents you just handed me, very briefly 09:34:58

3 reviewed, not in detail, there is a lot of 09:35:00

4 information in those documents, even though they are 09:35:04

5 not constructed in the usual way that I would have 09:35:06

6 constructed the study design just to report it, it 09:35:12

7 doesn't take very long to realize that they did a 09:35:14

8 lot of work with a lot of animals in a lot of 09:35:16

9 smokers. 09:35:18

10 In the last one you mentioned, and it was 09:35:20

11 very carefully done, they had analyses, they had 09:35:24

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12 tables, they had figures, and so on. 09:35:24

13 So if you look at those reports, those -- 09:35:30

14 from what I can see from them might have been easily 09:35:32

15 publishable if someone had taken the time to do it. 09:35:36

16 (Defendants' Deposition Exhibit 2460 09:36:02

17 was marked for identification.)

18 MS. WALBURN: Counsel, can I have a copy? 09:36:04

19 MR. GALE: Oh, yes. 09:36:18

20 BY MR. GALE:

21 Q. Okay. Doctor, the court reporter has handed you 09:36:20

22 what's been marked as Exhibit 2460. It's a document 09:36:24

23 entitled Research Conference Southampton 1962. 09:36:28

24 I see that you have turned to your copy in 09:36:30

25 your notebook there. 09:36:30

1 A. I just want to make sure it's the same thing. 09:36:34

2 Q. Okay. I will represent to you, Doctor, that the 09:36:46

3 Bates Number range is continuous and there aren't 09:36:50

4 any missing pages, if that helps you. 09:36:54

5 A. Okay. So that means I can go to the end. Yeah, I 09:37:14

6 have got it. 09:37:14

7 Q. Have you seen Exhibit 2460 before today? 09:37:22

8 A. Yes. This is one that, unlike the others, I am a 09:37:26

9 little more familiar with just because I have looked 09:37:28

10 at it. I need to ask one other question. Is it in 09:37:32

11 this book in any other place? 09:37:34

12 MR. WILSON: I am not sure. Maybe he can 09:37:44

13 find that out, because I don't know that I have 09:37:46

14 got -- I think it may be, but if it isn't, that's 09:37:48

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15 fine. 09:37:50

16 BY MR. GALE:

17 Q. Okay. While your counsel is looking for it, let me 09:37:52

18 ask you a couple of basic questions. 09:37:54

19 A. Okay. 09:37:54

20 Q. In this document there are recorded certain comments 09:37:56

21 from Charles Ellis; isn't that correct? And if it 09:38:02

22 helps you, why don't you turn to the page that's 09:38:04

23 marked -- 09:38:04

24 A. Yeah, Charles Ellis was the index or -- the contents 09:38:08

25 would say The Smoking and Health Problem, 09:38:12

1 Sir Charles Ellis. 09:38:20

2 Q. Exactly right. It starts on page 3. 09:38:22

3 A. The chair of the committee meeting was a 09:38:22

4 Mr. McCormick, whoever he is, or was. 09:38:26

5 Q. Okay. Turn to page 3, if you could. 09:38:26

6 A. Which page? 09:38:26

7 Q. 3. 09:38:26

8 A. 3 at the top of the page? 09:38:30

9 Q. Yes, sir. Next page. There you are. 09:38:32

10 A. Yep. 09:38:34

11 Q. Do you see that this is where the comments of 09:38:36

12 Sir Charles Ellis begin in this document? 09:38:38

13 A. I do. 09:38:38

14 Q. Okay. In that very first paragraph he refers to the 09:38:42

15 Report of the Royal College of Physicians. 09:38:44

16 Do you see that? 09:38:44

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17 A. I do. 09:38:44
18 Q. Are you familiar with the report published by the 09:38:46
19 Royal College of Physicians in 1962 entitled Smoking 09:38:50
20 and Health? 09:38:52
21 A. I think I referred to that in my expert report as 09:38:56
22 one of the things that I reviewed. If I didn't, I 09:38:58
23 am familiar with it, but I haven't read it for a 09:39:00
24 long time.
25 Q. Okay. So you are familiar with the Royal College of 09:39:02

1 Physicians' 1962 report? 09:39:04
2 MS. WALBURN: Objection, asked and 09:39:06
3 answered. 09:39:06
4 THE WITNESS: I have read that at some 09:39:08
5 time, but I am -- I don't know when I read it last 09:39:12
6 and I couldn't quote things verbatim from it. It's 09:39:16
7 been awhile. 09:39:18
8 BY MR. GALE:
9 Q. Do you have any recollection regarding what the 09:39:18
10 Royal College of Physicians discussed as to the 09:39:22
11 either addictive or habituating qualities of 09:39:28
12 nicotine in cigarette smoke? 09:39:30
13 A. Actually, I would have to look at the document 09:39:40
14 because I don't -- I don't recall. It's been a long 09:39:42
15 time since I looked at that, and so if you have got 09:39:44
16 it, we can look at that. 09:39:46
17 Q. I do have a copy of it with me if you would like to 09:39:48
18 see it. 09:39:48
19 A. I am going to have to look at it. I am not going to 09:39:52

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20 just be able to (indicating). It's been a long time 09:39:56
21 since I have reviewed this. 09:39:56
22 Q. That's fine. I can tell you exactly where in the 09:40:00
23 document the language is that I am interested in and 09:40:02
24 I want to ask you about. 09:40:04
25 A. Okay. 09:40:04

1 Q. Okay? 09:40:04
2 (Defendants' Deposition Exhibit 2461 09:40:38
3 was marked for identification.)
4 THE WITNESS: I was just looking through
5 my bibliography.
6 BY MR. GALE:
7 Q. Hold on for a second. 09:40:38
8 Is it listed in your bibliography, Doctor? 09:40:40
9 A. I don't remember seeing this. I don't see this 09:40:46
10 here. I have just done a quick scan of my 09:40:50
11 bibliography for my expert report. 09:40:52
12 I recall reading the Royal College of 09:40:54
13 Physicians' report, but I don't know when it was. 09:40:58
14 MS. WALBURN: Is this document 09:41:00
15 predesignated, Counsel? 09:41:02
16 MR. GALE: That's what I was about to ask 09:41:04
17 you. If it's not listed in his bibliography, then I 09:41:08
18 guess it was not predesignated. 09:41:10
19 The witness has asked to see the document 09:41:12
20 and I am happy to show it to him, but I don't want 09:41:16
21 to run afoul of the rules. 09:41:16

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22 MS. WALBURN: Well, that's a 70-page 09:41:20
23 document, and I can't tell you as I sit here today 09:41:22
24 whether it's predesignated, or not, because I don't 09:41:26
25 have a recall of everything that's in Dr. Hurt's 09:41:28

1 listing. 09:41:28
2 MR. GALE: Well, I mean, I am happy to 09:41:30
3 show it to him. There is a specific portion in 09:41:32
4 there I want to ask him about but I can easily go by 09:41:36
5 it because, again, I don't want to run afoul of any 09:41:38
6 rules, and if somehow this has not been 09:41:38
7 predesignated because it's not listed -- if it would 09:41:40
8 have been predesignated, it would have been because 09:41:42
9 it's listed in his bibliography attached to his 09:41:46
10 report. If it's not listed in that bibliography, 09:41:48
11 then it's not predesignated. 09:41:50
12 MS. WALBURN: Again, I don't know as I sit 09:41:52
13 here whether it is or not. 09:42:04
14 I will note that on Page 30 of Dr. Hurt's 09:42:06
15 report there is the 1977 Royal College of Physician 09:42:10
16 report, but -- 09:42:12
17 MR. GALE: But not the 1962? 09:42:14
18 MS. WALBURN: And again, I can't help that 09:42:16
19 it's not at another place in here. I just don't 09:42:20
20 know.
21 MR. GALE: Well, out of an abundance of 09:42:22
22 caution, I will go past it. 09:42:24
23 MR. DARLING: I think you should because 09:42:40
24 otherwise it gets screwed up. 09:42:42

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25 MR. GALE: Okay. That's fine.

1 THE WITNESS: So what was the date on 09:42:48
2 that? 09:42:48
3 BY MR. GALE:
4 Q. 1962. 09:42:48
5 Is it your understanding -- let me take 09:42:50
6 your attention back to Exhibit 2460, if I could, the 09:42:54
7 Southampton Research Conference, and Page 3, where 09:42:56
8 Sir Charles Ellis is starting his talk. 09:43:00
9 A. Okay. 09:43:00
10 Q. Is it your understanding, based on your prior review 09:43:06
11 of this document, that Sir Charles Ellis is 09:43:10
12 discussing the Royal College of Physicians' 1962 09:43:14
13 report? 09:43:14
14 MS. WALBURN: Objection, form. 09:43:16
15 THE WITNESS: Do you mean discussing the 09:43:26
16 whole report, parts of it? I mean, I can tell you 09:43:30
17 what he said, as far as what he says in the document 09:43:36
18 you handed me. 09:43:40
19 BY MR. GALE:
20 Q. Okay. And what he says at the very beginning 09:43:42
21 is "After reading the report of the Royal College of 09:43:44
22 Physicians and the debate in the House of Lords, the 09:43:46
23 dominant impression I received was that a lot of 09:43:50
24 people who had reached an emotional conclusion in 09:43:54
25 which they believed passionately and sincerely." 09:43:58

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1 Is that right? 09:43:58
2 A. That's what it says, that's correct. 09:44:00
3 Q. Let me draw your attention to the next page, if I 09:44:02
4 could, Page 4. Okay? I want to draw -- I want to 09:44:10
5 ask you about the portion that I see in your notes 09:44:10
6 as highlighted, which is the first full paragraph on 09:44:14
7 that page that refers to smoking as a habit of 09:44:28
8 addiction that is pleasurable. 09:44:28
9 A. Uh-huh. 09:44:28
10 Q. Have you made any attempt to compare what 09:44:30
11 Sir Charles Ellis says there to what the Royal 09:44:32
12 College of Physicians says about the addictive or 09:44:32
13 habituating properties of nicotine and cigarette 09:44:34
14 smoke? 09:44:34
15 A. Well, I think I just told you, if I reviewed the 09:44:38
16 Royal College of Physicians' Report on Smoking and 09:44:42
17 Health from '62 it's been a long time ago and, no, I 09:44:46
18 have not made any comparison between those two 09:44:48
19 things. It might be interesting, though. 09:44:50
20 Q. Now, when Sir Charles Ellis refers to smoking as a 09:45:00
21 "habit of addiction," in the Southampton conference 09:45:04
22 report, do you contend that he used the 09:45:08
23 word "addiction" in the same sense and with the same 09:45:12
24 definition that the Surgeon General's Report used 09:45:16
25 that term in 1964? 09:45:18

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1 A. All I can tell you is what's written here, because 09:45:24
2 that was a long time ago and I obviously wasn't 09:45:26
3 present. It says, "Lastly, smoking is a habit of 09:45:34
4 addiction that is pleasurable." 09:45:36
5 It's interesting he used both terms in the 09:45:38
6 same sentence. I don't know what his background was 09:45:42
7 as far as his training, and he, obviously, was 09:45:46
8 concerned from the previous page about the report of 09:45:52
9 the Royal College of Physicians. 09:45:54
10 And it's interesting that he has got both 09:46:00
11 words in there because addiction is something that 09:46:04
12 wasn't commonly talked about in those times, as -- 09:46:08
13 particularly as regard to nicotine as an addicting 09:46:12
14 substance. 09:46:14
15 MR. GALE: Can you please mark this as the 09:46:16
16 next exhibit. 09:46:16
17 (Defendants' Deposition Exhibit 2462 09:46:18
18 was marked for identification.) 09:46:52
19 BY MR. GALE:
20 Q. Doctor, the court reporter has handed you what's 09:46:56
21 been marked as Exhibit 2462. 09:46:58
22 A. Okay. 09:46:58
23 Q. It's an article that is listed in the bibliography 09:47:02
24 attached to your expert report published in 1963 in 09:47:06
25 the American Journal of Psychiatry. It's entitled 09:47:10

1 Addictive Aspects in Heavy Cigarette Smoking. 09:47:16
2 A. Uh-huh. 09:47:16

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3 Q. Have you read this before today, sir? 09:47:18
4 A. At some point I have read it. I couldn't tell you 09:47:20
5 when it was. 09:47:22
6 Q. Let me draw your attention, if I could, to Page 971, 09:47:28
7 which is the next to the last page. 09:47:32
8 A. I need just a minute to kind of reorient myself from 09:47:34
9 those to this one, so -- 09:47:38
10 Q. Okay. I will note that the witness is starting to 09:47:40
11 read the document. 09:47:40
12 A. Which page are we going to? 09:49:32
13 Q. Page 971 under the heading Summary and Conclusions. 09:49:36
14 A. Okay. That's where I am. So let me just do that. 09:50:18
15 Okay. 09:50:18
16 Q. I want to draw your attention, first of all, to the 09:50:20
17 paragraph numbered 2. It reads "Heavy cigarette 09:50:24
18 smokers thus appear to be true addicts, showing not 09:50:26
19 only social habituation but mild physiological 09:50:30
20 withdrawal effects." 09:50:32
21 A. What it says. 09:50:34
22 Q. Okay. Do you also see paragraph number 4 just below 09:50:42
23 that? 09:50:42
24 A. Uh-huh, I do. 09:50:44
25 Q. Okay. Let me read that into the record. "With 09:50:44

1 appropriate motivation very heavy smoking can be 09:50:48
2 given up, though just as readily resumed. Concerns 09:50:50
3 about the dangers of smoking, latent but readily 09:50:54
4 mobilized in our population, are effectively masked 09:50:58
5 by denial and related psychic defenses. They must 09:51:00

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6 be unmasked to understand and treat heavy smoking if 09:51:04
7 treatment is desired." 09:51:06
8 Do you see that, sir? 09:51:08
9 A. Uh-huh. That's correct. 09:51:08
10 Q. Now, I am assuming since this was listed as an 09:51:12
11 attachment to your expert report this was among the 09:51:18
12 documents that you have reviewed? 09:51:18
13 A. I have, but it's been a long time since I have 09:51:20
14 reviewed it. I can't tell you when exactly I did 09:51:24
15 that. 09:51:24
16 Q. Okay. You would agree with me that there is at 09:51:26
17 least some supporting scientific literature in 1963 09:51:30
18 that cigarette smoking could be referred to as an 09:51:32
19 addiction?
20 A. This obviously says that. It says -- the title -- 09:51:38
21 in contrast to Project Hippo, the title is Addictive 09:51:40
22 Aspects in Heavy Cigarette Smoking. It's qualified 09:51:44
23 in that respect. It talks about heavy cigarette 09:51:46
24 smoking. 09:51:46
25 And these people that they studied in this 09:51:48

1 study, as I think they pointed out at the end, were 09:51:54
2 really a subset of the population. They were, 09:51:56
3 basically, unemployed, derelict type people, 09:52:00
4 according to what they wrote in the description of 09:52:02
5 them. 09:52:04
6 And furthermore, one of the authors 09:52:08
7 apparently had difficulty with nicotine withdrawal, 09:52:12

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8 as stated on the bottom of Page 970, that this 09:52:14
9 person six and a half years after total cessation of 09:52:18
10 heavy smoking still having stereotype smoking 09:52:22
11 dreams.
12 So there is insight here that shows that 09:52:26
13 there is at least some knowledge about that. 09:52:28
14 Q. Okay. Let me draw your attention back to Page 966, 09:52:32
15 if I could. It's the first page, the title page of 09:52:34
16 the document. 09:52:34
17 In the Acknowledgment section at 09:52:38
18 Footnote 1, do you see that the work was supported, 09:52:40
19 in part, by a grant from the Tobacco Industry 09:52:44
20 Research Committee? 09:52:46
21 A. I see that. 09:52:46
22 Q. Do you understand that to be the predecessor 09:52:48
23 organization to the Council for Tobacco Research or 09:52:50
24 CTR? 09:52:52
25 A. I think I understand that. 09:52:54

1 Q. You know that the TIRC was a tobacco industry trade 09:52:58
2 group? 09:53:00
3 A. Funded by the tobacco industry, you mean? 09:53:02
4 Q. Yes, sir. 09:53:04
5 A. And so the money for this group came from companies 09:53:06
6 like yours; is that what you mean? 09:53:08
7 Q. Yes. Is that your understanding? 09:53:10
8 A. That's my understanding, and as best I understand 09:53:16
9 from what was published in the JAMA articles, it was 09:53:18
10 a public relations group to really help combat all 09:53:22

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11 of this, as it's played out. 09:53:26

12 Q. But it's your -- 09:53:28

13 MR. PURDY: Object to that as 09:53:30

14 non-responsive, move to strike. 09:53:32

15 BY MR. GALE:

16 Q. But it's your understanding that the funding for the 09:53:34

17 TIRC came from tobacco companies? 09:53:36

18 A. That's my understanding, and I could -- I have never 09:53:40

19 really delved into it to know. I don't know what 09:53:44

20 the budget is, I don't know what those details are, 09:53:46

21 but it's my understanding it's an attachment to the 09:53:50

22 tobacco companies. 09:53:50

23 And as I think we said yesterday, ya'll 09:53:54

24 are all kind of in this together, you are kind of 09:53:56

25 bedfellows, and they just happened to be one of the 09:54:00

1 bedfellows, as is the Tobacco Institute. You are 09:54:02

2 kind of all in the same boat. 09:54:04

3 Q. Have you made any attempt, Doctor, to review the 09:54:06

4 published scientific literature available at the 09:54:08

5 time the 1964 Surgeon General's Report was prepared 09:54:10

6 to determine whether cigarette smoking was referred 09:54:14

7 to as an addiction in other published articles? 09:54:18

8 MS. WALBURN: Objection, form. 09:54:20

9 THE WITNESS: That's a -- that's a lot. I 09:54:24

10 mean, can you be more specific as far as -- I mean, 09:54:28

11 what do you mean? 09:54:28

12 You mean just -- I have looked at a lot of 09:54:30

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13 documents, I have looked at a lot records, and so 09:54:34
14 it's hard to -- in the context of what we are doing 09:54:36
15 here, to separate out what I might have done before 09:54:38
16 I had opportunities to look at these internal 09:54:42
17 documents, and so on. So -- 09:54:44
18 BY MR. GALE:
19 Q. Let me try to focus it for you. 09:54:46
20 A. Please do. 09:54:48
21 Q. As part of your preparation for this case have you 09:54:50
22 made any attempt to review published scientific 09:54:52
23 literature available about the time the '64 Surgeon 09:54:58
24 General's Report was prepared to see if cigarette 09:55:00
25 smoking was referred to as an addiction? 09:55:02

1 A. The documents I have reviewed are the ones that are 09:55:08
2 in my report, and though I may not have focused on 09:55:14
3 that specifically, I was looking for articles that 09:55:18
4 might have been in my files that had to do with 09:55:22
5 nicotine as an addictive substance and nicotine as a 09:55:24
6 drug, but I am not sure I ever have done a 09:55:28
7 side-by-side comparative analysis. 09:55:30
8 It would actually be an interesting 09:55:34
9 article to write, it would be the side-to-side 09:55:36
10 comparison analysis what was available in the public 09:55:38
11 literature prior to that and what was available in 09:55:40
12 the internal documents, if we ever get all of them, 09:55:44
13 to know what was known by whom and by -- that would 09:55:46
14 be a nice peer review article, actually. 09:55:48
15 Q. And this comparison is not something that you have 09:55:50

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16 done to date; is that correct? 09:55:52

17 MS. WALBURN: Objection, form, asked and 09:55:54

18 answered. 09:55:54

19 THE WITNESS: I haven't looked at all of 09:55:56

20 the internal documents and have not reviewed them 09:56:02

21 all in detail. I mean, there is a large amount of 09:56:04

22 documents. 09:56:06

23 The number of scientific articles having 09:56:08

24 to do with this is also fairly large and it's 09:56:12

25 conceivable I have not seen all of those, as well. 09:56:16

1 What I am impressed by is how much more 09:56:18

2 was known by your company than what was known by the 09:56:22

3 scientific literature. It's just kind of orders of 09:56:26

4 magnitude that are different. 09:56:28

5 MR. GALE: Okay. Why don't we take a 09:56:32

6 break. 09:56:32

7 VIDEOGRAPHER: We are temporarily going 09:56:32

8 off the video record. The time is now 9:56 a.m. 09:56:36

9 (A recess was taken and Defendants' Deposition

10 Exhibit 2463 was marked for identification.) 10:09:52

11 VIDEOGRAPHER: We are back on the video 10:09:54

12 record. The time is now 10:09 a.m. 10:09:56

13 BY MR. GALE:

14 Q. Dr. Hurt, the court reporter has handed you what's 10:10:00

15 been marked as Exhibit 2463. It's a three-page 10:10:04

16 letter from Sir Charles Ellis to G.F. Todd. Have 10:10:12

17 you seen this document before today? 10:10:12

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18 And if it helps you to answer that 10:10:14
19 question, I will note that included in the materials 10:10:16
20 that were produced by counsel at Robins, Kaplan were 10:10:20
21 some notes that you apparently took on this 10:10:24
22 document. 10:10:24
23 A. Say that again. 10:10:28
24 Q. I received, as part of the materials from Robins, 10:10:32
25 Kaplan, a typewritten set of notes, and I am 10:10:34

1 assuming they are your notes -- 10:10:36
2 A. Okay. 10:10:38
3 Q. -- to the document that I have just handed you. 10:10:40
4 A. Okay. Could I see those? 10:10:42
5 Q. Sure, if you want to see those, that's fine. They 10:10:44
6 are probably in the notebook next to you, but I am 10:10:48
7 happy to mark this as the next exhibit, which is 10:10:50
8 2464, and again, appear to be your notes on the 10:10:52
9 document that's been marked as 2463. 10:10:54
10 A. You are going to crash her computer. 10:10:58
11 MS. WALBURN: So there is no error in the 10:11:00
12 record, as your co-counsel is aware, those notes are 10:11:04
13 not in this notebook. 10:11:06
14 THE WITNESS: They are not in here. 10:11:08
15 MR. GALE: Oh, okay. 10:11:08
16 (Defendants' Deposition Exhibit 2464 10:11:24
17 was marked for identification.)
18 BY MR. GALE:
19 Q. Have you seen the Sir Charles Ellis letter before, 10:11:28
20 sir? 10:11:28

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21 A. I have. 10:11:30

22 MS. WALBURN: Excuse me. Can I have a 10:11:32

23 copy of the second exhibit, as well, the notes? 10:11:34

24 MR. GALE: Oh, of course. 10:11:38

25 BY MR. GALE:

1 Q. Have you read Exhibit 2463 before today? 10:11:40

2 A. Yes, I have. I don't know exactly when in the 10:11:46

3 context of all of this, and I don't think that I put 10:11:50

4 a date on the abstract, either, but it's sometime 10:11:54

5 within the last six months or more. Somewhere in 10:11:58

6 that time frame. 10:12:00

7 I have read it, but it's been awhile and I 10:12:02

8 haven't gone back to review the abstract, so -- 10:12:04

9 Q. Okay. Let me draw your attention to the second page 10:12:06

10 of this three-page document. The second to the last 10:12:08

11 paragraph on page 2, are you there with me? 10:12:12

12 A. "The people who oppose"? 10:12:16

13 Q. Yes, sir. About halfway down that paragraph there 10:12:20

14 is a statement, "Nicotine is a wonderfully 10:12:22

15 beneficent drug which does not, like Morphine, 10:12:26

16 sleeping pills, or even Dexedrine, lead to 10:12:28

17 cumulative addiction." 10:12:30

18 Do you see that statement? 10:12:32

19 A. Uh-huh. 10:12:32

20 Q. Is it your understanding based on this document and 10:12:34

21 any other internal documents that you reviewed that 10:12:38

22 Sir Charles Ellis believed that nicotine had 10:12:40

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23 beneficent effects? 10:12:44

24 A. That's what he says here. I don't know the basis on 10:12:48

25 which he says this. This is a letter, so it's not a 10:12:52

1 scientific report, so this is his opinion, is the 10:12:54

2 way I would interpret this, so it's not a -- this is 10:12:58

3 not a matter of science, necessarily, this is what 10:13:02

4 he thinks. 10:13:02

5 And I am not sure I know what beneficent 10:13:04

6 is. 10:13:06

7 Q. Okay. Are you aware of any documents that you have 10:13:10

8 reviewed that would show that Sir Charles Ellis 10:13:12

9 believed that nicotine had any effects that would 10:13:14

10 not be considered beneficent effects? 10:13:18

11 MS. WALBURN: Objection, form. 10:13:20

12 THE WITNESS: As I just said, I am not 10:13:22

13 sure I know what beneficent effects are. If you can 10:13:24

14 define that for me, I can tell you what it might 10:13:28

15 mean. 10:13:28

16 BY MR. GALE:

17 Q. Are you aware of any documents that you have 10:13:30

18 reviewed that show that Sir Charles Ellis believed 10:13:32

19 that nicotine had harmful effects on smokers? 10:13:36

20 A. You know, I reviewed a lot of documents and I have 10:13:40

21 seen his name a lot so he must be a fairly important 10:13:42

22 individual, and I -- I couldn't point to one 10:13:48

23 directly. 10:13:48

24 I mean, there is a lot of statements in 10:13:50

25 these documents from long ago, as well as more 10:13:54

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1 recently, about the harmful effects of smoking on 10:13:58
2 health. 10:13:58
3 And he talks in terms of -- mentioning 10:14:04
4 this, but in the context above that, in the sentence 10:14:08
5 or two above he talks about in the context of 10:14:10
6 "people who oppose smoking do so on the grounds 10:14:12
7 that it's an important contributory cause of lung 10:14:18
8 cancer," and so on. 10:14:18
9 So whether or not he even believes that, I 10:14:22
10 don't know, according to this document, and I have 10:14:24
11 reviewed hundreds of pages of documents, so I 10:14:28
12 can't -- I can't tell you for sure. 10:14:30
13 Q. In the sentence that I read into the record a little 10:14:32
14 while ago do you see that Sir Charles Ellis makes a 10:14:34
15 distinction between nicotine, on the one hand, and 10:14:38
16 Morphine, sleeping pills and Dexedrine, on the 10:14:42
17 other? 10:14:42
18 A. That's what he says, right, he says, "which does 10:14:44
19 not, like Morphine, sleeping pills, or even 10:14:48
20 Dexedrine, lead to cumulative addiction." 10:14:50
21 Q. Now, in the 1964 Surgeon General's Report there is 10:14:52
22 also an explicit distinction made between nicotine, 10:14:56
23 on the one hand, and Morphine and barbiturates on 10:15:02
24 the other; isn't that correct? 10:15:02
25 A. I would have to look back. I think there was. I 10:15:08

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1 think there was a distinction made. 10:15:12
2 Q. It was marked as an exhibit yesterday, Chapter 13 of 10:15:16
3 the Surgeon General's Report. It's Exhibit Number 10:15:20
4 2452. 10:15:20
5 And where I want to draw your specific 10:15:26
6 attention is to the bottom of Page 350. Do you see 10:15:42
7 that last paragraph at the bottom of the page? 10:15:46
8 A. I do, yeah. 10:15:46
9 Q. Okay. There is a sentence that reads, "In medical 10:15:48
10 and scientific terminology, the practice should be 10:15:50
11 labeled habituation to distinguish it clearly from 10:15:54
12 addiction. Since the biological effects of tobacco, 10:15:56
13 like coffee and other caffeine-containing beverages, 10:16:00
14 betel morsel chewing, and the like, are not 10:16:04
15 comparable to those produced by Morphine, alcohol, 10:16:06
16 barbituates and many other potent addicting drugs." 10:16:12
17 Did I read that correctly? 10:16:14
18 A. I think you did. 10:16:14
19 Q. Would you agree with me, then, that in the 1964 10:16:16
20 Surgeon General's Report there is a distinction 10:16:18
21 drawn between nicotine, on the one hand, and 10:16:22
22 Morphine, alcohol and barbiturates on the other? 10:16:24
23 A. That's what -- that's what the report says. 10:16:28
24 Q. Doctor -- 10:16:34
25 A. I was trying to find cocaine. 10:16:36

1 Q. Well, my question wasn't about cocaine, and there is 10:16:38

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2 really not a question pending. 10:16:40

3 A. Well, that's another potent addicting drug. 10:16:44

4 Q. Okay. There is not a question pending, though, 10:16:46

5 Doctor. 10:16:46

6 (Defendants' Deposition Exhibit 2465 10:17:08

7 was marked for identification.) 10:17:16

8 BY MR. GALE:

9 Q. Okay. Doctor, if I could call your attention to the 10:17:18

10 exhibit that the court reporter just handed you. 10:17:20

11 What's Exhibit Number -- 10:17:20

12 A. Are we through with this one? 10:17:22

13 Q. Yes, sir, we are. 10:17:22

14 It's Exhibit Number 2465. It's a document 10:17:24

15 entitled -- well, it's dated February 13, 1962, 10:17:26

16 entitled The Effects of Smoking, Proposal for 10:17:28

17 Further Research Contracts with Battelle. 10:17:32

18 Have you seen this document before today, 10:17:34

19 sir? 10:17:34

20 A. I am almost sure I have. In fact, I think I have 10:17:42

21 got it in my book. Is it in my book? 10:17:46

22 MS. WALBURN: I believe that's right. 10:17:48

23 THE WITNESS: Let me just turn to that 10:17:50

24 because that's -- do you know where it is? 10:17:58

25 MR. WILSON: Yeah, it's right after the 10:18:00

1 tab that says 2A, the first document. 10:18:02

2 THE WITNESS: Yeah. There it is. Okay. 10:18:04

3 MS. WALBURN: Counsel, can I ask what this 10:18:06

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4 second set of Bates numbers reflects? 10:18:08

5 MR. GALE: I don't know. 10:18:10

6 THE WITNESS: It's not on the one that I 10:18:12

7 have. 10:18:12

8 MS. WALBURN: Do any of the B.A.T. counsel 10:18:16

9 know what the second set of Bates numbers reflects? 10:18:18

10 MR. LOSS: B.A.T. Co. I do not. 10:18:36

11 BY MR. GALE:

12 Q. Now, this document, Exhibit 2465, it's a proposal 10:18:40

13 from Sir Charles Ellis regarding funding of research 10:18:44

14 by Battelle; isn't that correct? 10:18:48

15 A. That's what the title says. The Effects of Smoking, 10:18:52

16 Proposal for Further Research Contracts with 10:18:56

17 Battelle. 10:18:56

18 It doesn't say at the beginning that it's 10:18:58

19 Charles Ellis but I think it does at the very end, 10:19:02

20 wherever the end is. 10:19:02

21 Q. If you look at Page 5, I believe you will see 10:19:06

22 Sir Charles Ellis's signature. 10:19:08

23 A. Yes, there it is. 10:19:10

24 Q. So do you understand this to be a proposal from 10:19:10

25 Sir Charles Ellis regarding funding of work at 10:19:14

1 Battelle? 10:19:14

2 A. That's what it looks like it is. It has a budget 10:19:18

3 and has report dates, and so on. It looks like 10:19:24

4 that. 10:19:24

5 Q. This document reviews certain results of Battelle 10:19:32

6 research; isn't that right? And I am looking 10:19:36

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7 specifically at the first five pages, if that helps 10:19:40
8 you focus. 10:19:40
9 A. Well, it doesn't really explicitly say that. It 10:19:56
10 talks about, in general terms, what is known or what 10:20:00
11 they are talking about as far as the physiological 10:20:04
12 and psychological effects of smoking, and so on. 10:20:04
13 Q. What page are you reading from, sir? 10:20:06
14 A. Page 6. 10:20:06
15 Q. Oh, okay. I was focused on the first five pages. 10:20:10
16 A. First five pages. 10:20:12
17 Q. Right. In the first five pages doesn't this 10:20:14
18 document review some of the work that had already 10:20:18
19 been performed at Battelle, at least in summary 10:20:20
20 fashion? 10:20:20
21 A. A reader couldn't tell what they did. Mad Hatter I 10:20:26
22 is listed as "Preliminary Investigation of the 10:20:32
23 Factors Influencing Demanding Habits and Literature 10:20:34
24 Survey," and gives -- what I said earlier is more 10:20:38
25 accurate than what you just said, which is that this 10:20:40

1 shows that there were some projects and budgets and 10:20:42
2 amount of money expended when they were done. 10:20:44
3 The reader couldn't tell what they did 10:20:46
4 with this. I mean, the titles are helpful, but they 10:20:50
5 are not very explanatory, so I couldn't tell you 10:20:54
6 what the theme of the research was, necessarily. 10:20:56
7 Q. Okay. Let me take you to Page 6, if I could. There 10:21:00
8 is a short paragraph in the middle of the page. Let 10:21:02

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9 me read it into the record. "On the other hand, 10:21:04
10 smoking has certain very definite advantages. 10:21:08
11 Foremost is the way it helps the body to resist 10:21:10
12 stress, an effect that has been known since the 10:21:14
13 earliest days of smoking." 10:21:14
14 Did I read that correctly? 10:21:16
15 A. You did. 10:21:16
16 Q. Do you agree with that statement, sir? 10:21:18
17 A. In the context of what? I mean, this is just what 10:21:22
18 this person says. 10:21:24
19 Q. Okay. Let me focus it, then. 10:21:26
20 A. Smoking marijuana? Smoking cigarettes? Smoking 10:21:30
21 pipe? Smoking a cigar? Smoking dope? I mean, you 10:21:34
22 are -- 10:21:34
23 Q. All right. Assuming that Sir Charles Ellis is 10:21:36
24 writing about smoking cigarettes, do you agree that 10:21:40
25 it has been known since the earliest days of smoking 10:21:46

1 that smoking cigarettes helps the body to resist 10:21:52
2 stress? 10:21:52
3 A. Well, if you focus on Page 6 -- I have just scanned 10:21:58
4 it -- smoking is mentioned, but I don't see 10:22:04
5 cigarettes anywhere. 10:22:04
6 Q. Okay. Well, I am asking you to -- I will ask it as 10:22:08
7 a hypothetical question. I want you to assume for 10:22:10
8 purposes of my question that Sir Charles Ellis is 10:22:12
9 referring to smoking cigarettes. 10:22:14
10 Do you understand the assumption? 10:22:16
11 A. Yeah. 10:22:16

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12 Q. Okay. Do you agree that since the earliest days of 10:22:20
13 smoking cigarettes it has been known that smoking 10:22:24
14 cigarettes helps the body to resist stress? 10:22:26
15 A. Well, the earliest days of smoking cigarettes isn't 10:22:36
16 very long ago. It's only in the 1880's that 10:22:38
17 cigarettes became a very prominent part of our 10:22:42
18 society. 10:22:42
19 Q. Was it known from that time? 10:22:44
20 MS. WALBURN: Excuse me, Counsel. Please 10:22:46
21 don't interrupt. 10:22:46
22 THE WITNESS: So it was -- cigarettes were 10:22:50
23 used back in the 1880s and 1890s and I have not seen 10:22:54
24 any documents, tobacco company documents, nor any 10:22:58
25 published literature from the 1880s or 1890s, which 10:23:04

1 were the earliest days of smoking cigarettes, to say 10:23:08
2 anything about this. 10:23:08
3 I have not seen any literature from the 10:23:10
4 19th century to deal with this. That's when 10:23:16
5 cigarette smoking began and it became, obviously, 10:23:18
6 much more prevalent in this century, as it was 10:23:22
7 promoted and marketed, but in the earliest days -- 10:23:26
8 what's the earliest days? I mean, you want -- when 10:23:28
9 are the earliest days? 10:23:30
10 BY MR. GALE:
11 Q. Okay. Let me draw your attention, if I could, to 10:23:32
12 Page 10 of the document. The first full paragraph 10:23:48
13 there reads, "These" -- the first sentence of it 10:23:52

http://legacy.library.ucsf.edu/tid/uqm35a00/pdf Source: https://www.industrydocuments.ucsf.edu/docs/rzhd0001

14 reads "These experiments are encouraging since they 10:23:56
15 are beginning to elucidate what may be termed the 10:23:58
16 basic effect of nicotine, but it is important to 10:24:02
17 note that this cannot be responsible for addiction 10:24:04
18 because it all occurs in too short a time." 10:24:06
19 Do you see that statement? 10:24:06
20 A. Uh-huh. 10:24:08
21 Q. Do you believe that that accurately reflects the 10:24:10
22 analysis above it in this document that's been 10:24:12
23 marked as Exhibit 2465? 10:24:14
24 A. Well, without really knowing more about what -- I 10:24:20
25 view this document as the opinions of the person 10:24:24

1 that wrote them. This is not something that -- if 10:24:28
2 you go back to the paragraph before that it 10:24:30
3 says, "The response to stress in someone not under 10:24:32
4 the influence of nicotine starts in the part of the 10:24:34
5 brain named the hypothalamus," so this is kind of 10:24:38
6 this person's summary of that, "and follows a series 10:24:44
7 of fairly well-understood stages, ending up with the 10:24:46
8 release in the blood from the adrenal glands of 10:24:50
9 corticosteroids and adrenaline," and so on. 10:24:54
10 "Battelle, following previous work on 10:24:56
11 somewhat similar lines, have recently been able to 10:25:00
12 show in experiments on rats that the administration 10:25:04
13 of nicotine subcutaneously immediately enhances the 10:25:06
14 release of the adrenocorticotropic hormone, which 10:25:14
15 ultimately increases the amount of the 10:25:18
16 corticosteroids in the blood." 10:25:20

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17 And not without going -- without reading 10:25:22
18 through the rest of it, so -- and then in the last 10:25:26
19 part he says "A priori, the increased amounts of 10:25:28
20 corticosteroids" -- so this is a summary of probably 10:25:32
21 a very detailed bit of research which was obviously 10:25:36
22 carefully done. 10:25:38
23 And so I think your -- if I remember your 10:25:40
24 question correctly, it has to do with does this 10:25:42
25 first sentence -- is that an accurate reflection of 10:25:46

1 what went on in the paragraph above. 10:25:48
2 There is no way of telling from this 10:25:52
3 document because I do not have the base research 10:25:54
4 that they were -- that he was talking about at that 10:25:54
5 time, if that makes sense. 10:25:56
6 I mean, he summarizes in the paragraph all 10:25:58
7 the stuff that they had talked about, but that's his 10:26:02
8 interpretation and conclusion, and if I was going to 10:26:04
9 make a statement like you asked me to make, I would 10:26:06
10 need to know what the particulars of that were. 10:26:08
11 Q. So it's your understanding, then, that Exhibit 2465 10:26:12
12 reflects Sir Charles Ellis's opinions regarding the 10:26:16
13 Battelle work that he is describing? 10:26:18
14 A. He is the author of the report, and he had a basis 10:26:28
15 for some of this, obviously, in the work that was 10:26:32
16 done by someone -- I don't know if he did all the 10:26:36
17 work, or not -- but this is a summary of that, and 10:26:38
18 so without having another investigator or another 10:26:42

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19 author, then this would reflect his opinion about 10:26:46
20 that, I think. 10:26:48
21 Q. And it's your testimony that in order to draw 10:26:50
22 conclusions regarding that work that he describes 10:26:52
23 here, you would prefer to look at the actual 10:26:54
24 research reports that were written by the 10:26:58
25 researchers? 10:26:58

1 MS. WALBURN: Objection, asked and 10:27:00
2 answered. 10:27:00
3 THE WITNESS: In order to answer your 10:27:02
4 question, which I think was does this sentence, 10:27:06
5 "These experiments are encouraging since" da da da 10:27:08
6 da da, I think your question was did I agree with 10:27:14
7 that sentence, is that an accurate reflection of 10:27:16
8 what was in the preceding paragraph. 10:27:18
9 Was that your question? 10:27:20
10 BY MR. GALE:
11 Q. It was. 10:27:20
12 A. Then in order to do that, I would need to see more 10:27:22
13 information, which would, basically, be the work 10:27:26
14 that they are talking about to come to any 10:27:28
15 conclusion like that. 10:27:28
16 Q. Okay. Well, let me ask a specific question, then. 10:27:32
17 In order for you, Dr. Hurt, to draw 10:27:36
18 conclusions regarding the results of the Battelle 10:27:38
19 research, would you prefer to review the research 10:27:44
20 reports, themselves, or the opinions of someone like 10:27:48
21 Sir Charles Ellis regarding what the results of that 10:27:50

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22 research was? 10:27:52

23 A. Given adequate time, the best way to do it would be 10:27:56

24 to look at the reports, themselves, and not the 10:28:00

25 summary but, you know, this is a huge amount of 10:28:02

1 information and it's going to take time to do it. 10:28:04

2 It's not something that's simple at all. 10:28:06

3 There is a lot of nuances to this, they 10:28:10

4 are highly technical, and there is a lot of 10:28:12

5 information there. 10:28:14

6 Q. Okay. I am handing the court reporter the next 10:28:16

7 exhibit, marked as 2466. 10:28:20

8 A. Are we through with this one? 10:28:22

9 Q. Yes, sir. 10:28:24

10 (Defendants' Deposition Exhibit 2466 10:28:50

11 was marked for identification.) 10:28:58

12 BY MR. GALE:

13 Q. Have you seen Exhibit 2466 before today, Doctor? 10:29:02

14 A. Yeah, I think so, I think we talked about this one 10:29:16

15 yesterday in terms of addiction and nicotine as an 10:29:20

16 addictive drug, and this is by -- also by Charles 10:29:22

17 Ellis. 10:29:24

18 I think we talked about this one 10:29:24

19 yesterday; is that right? 10:29:26

20 Q. I don't know because I wasn't asking the questions 10:29:28

21 yesterday. 10:29:28

22 A. I see. 10:29:30

23 Q. Let me ask you this: This document, Exhibit 2466, 10:29:38

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24 would you agree that this is a document that 10:29:44
25 reflects the opinions of the author? 10:29:44

1 A. Well, this describes a meeting in London, it says, 10:29:54
2 with Dr. Haselbach, H-A-S-E-L-B-A-C-H, 8-9 November 10:30:00
3 1961 reviewing the progress on Mad Hatter III and 10:30:06
4 Hippo and the possibility of starting up the new 10:30:08
5 project, Ariel, A-R-I-E-L. That's what the 10:30:14
6 introduction says. 10:30:14
7 And so it actually just kind of outlines a 10:30:18
8 meeting between, I assume, the only -- it doesn't 10:30:24
9 say who all was at the meeting, it says "Meeting in 10:30:26
10 London with Dr. Haselbach." I am assuming that 10:30:28
11 Charles Ellis was there and that Dr. Haselbach was 10:30:32
12 there but I don't know if anybody else was there. 10:30:34
13 So it's kind of a description of the -- 10:30:36
14 it's really almost like a minute item. I mean, it 10:30:38
15 tells you what they talked about and he fully 10:30:40
16 accepted, he pointed out, and so on. It's not -- I 10:30:44
17 am not sure -- 10:30:44
18 Q. Would you describe Exhibit 2466 as a scientific 10:30:48
19 research report? 10:30:50
20 MS. WALBURN: Objection, form. 10:30:56
21 THE WITNESS: I don't know -- scientific 10:30:58
22 research report in the sense of what? Like peer 10:31:02
23 reviewed paper or -- 10:31:04
24 BY MR. GALE:
25 Q. Well, let me ask you, how would you define -- would 10:31:08

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you consider this document, based on your own 10:31:10
definition, to be a scientific research report? 10:31:12
MS. WALBURN: Objection, form. 10:31:14
THE WITNESS: This document is a -- 10:31:18
basically, a summary and a minute item, is the way 10:31:22
that I would view this document, of a meeting 10:31:24
between at least Charles Ellis and Dr. Haselbach. 10:31:30
BY MR. GALE:
Q. Does it reflect any data or research results? 10:31:34
A. There is no data here. Data is usually displayed in 10:31:50
the form of a Results section or data is usually put 10:31:54
into the form of a table or in the form of a graph 10:31:56
or figure. There is no data here. They talk about 10:32:00
Project Hippo, they talk about definitions of 10:32:04
addiction. 10:32:06
"Haselbach seemed to think quite 10:32:08
reasonably well of the description I had given of 10:32:12
addiction October 25, 1961." 10:32:14
So it really, I think, just mainly talks 10:32:18
about what they talked about, and there is not a 10:32:22
research flavor to it except they have talked about 10:32:24
some of the research that was done. 10:32:26
Q. Okay. I am handing the court reporter what will be 10:32:28
marked as the next exhibit. 10:32:30
A. Are we through with that one? 10:32:32

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Q. Yes, sir. 10:32:32
The next exhibit number will be 2467. 10:32:36
It's titled A Tentative Hypothesis on Nicotine 10:32:38
Addiction. 10:32:38
(Defendants' Deposition Exhibit 2467 10:32:42
was marked for identification.)
THE WITNESS: What tab is it under again? 10:33:28
MS. WALBURN: 28. 10:33:28
THE WITNESS: 28. 10:33:30
MS. WALBURN: Counsel, can I have a copy 10:33:36
of that exhibit? 10:33:36
MR. GALE: Oh, of course. My apologies. 10:34:14
BY MR. GALE:
Q. Have you seen this Tentative Hypothesis on Nicotine 10:34:16
Addiction before today? 10:34:16
A. Yes, I think we talked about it yesterday, in the 10:34:20
testimony I gave yesterday. 10:34:22
Q. Okay. I will note that on the first page it's 10:34:24
written by C. Haselbach and O. Libert. Do you know 10:34:30
who those people are, who they work for? 10:34:32
A. No. I was having trouble reading this. It's hard 10:34:36
to see if it's a K or an H, Haselbach or Kaselbach, 10:34:42
and I -- my copy that I had is not any better than 10:34:48
your copy, so if you say it's H, then I guess I have 10:34:50
to accept that. 10:34:52

Q. Do you have any understanding of where either of 10:34:54
those people worked? 10:34:54

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3 A. No. 10:34:58
4 Q. Can you tell by this document or any other 10:35:02
5 information that you have what scientific 10:35:04
6 discipline, if any, they come from? 10:35:08
7 A. Well, first of all, they are -- they do not have any 10:35:14
8 degree symbols behind their name, so -- but that's 10:35:18
9 not unusual in British literature not to do that, so 10:35:22
10 in our literature, in the U.S. literature, M.D. or 10:35:28
11 Ph.D. would be listed as a way of kind of telling 10:35:32
12 who is on first. 10:35:32
13 I would have to scan this. I don't 10:35:38
14 recall -- it's really hard to read. They talk about 10:35:48
15 ACTH, they talk about free fatty acids, they talk 10:35:52
16 about rats, they talk about chronic application of 10:35:56
17 nicotine in so-called tolerant rats showing the 10:36:00
18 tolerance to their -- I don't -- I guess I don't see 10:36:04
19 anything in here that would help me to identify who 10:36:06
20 these people are, who they work for, or -- they talk 10:36:14
21 about research, but that's about the best I can do. 10:36:18
22 Q. Can you tell what either of their scientific 10:36:22
23 discipline is? 10:36:24
24 MS. WALBURN: Objection, asked and 10:36:26
25 answered. 10:36:26

1 THE WITNESS: Yeah, I think I just 10:36:28
2 answered that. I mean, the best I can tell is that 10:36:34
3 they have done some work -- actually, you can't even 10:36:36
4 tell that. 10:36:36

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5 You can -- they don't say we did this or 10:36:38
6 we -- it seems that these individuals are -- and 10:36:42
7 they talk about in -- this could be, actually, a 10:36:44
8 review of someone else's work. 10:36:46
9 So I cannot tell what discipline they are 10:36:52
10 from. I mean, they talk about research, but it 10:36:54
11 doesn't say that they did any. 10:36:58
12 BY MR. GALE:
13 Q. There is no scientific data reported in the 10:37:00
14 tentative hypothesis, is there? 10:37:04
15 MS. WALBURN: Objection, form. 10:37:06
16 THE WITNESS: Well, as I said earlier, 10:37:08
17 that according to the other -- like the other 10:37:10
18 document, there is no data in the usual sense of 10:37:12
19 seeing tables, figures, numbers, and so on. It's 10:37:16
20 just -- it probably is what it says it is, a 10:37:20
21 tentative hypothesis. 10:37:24
22 BY MR. GALE:
23 Q. Let's talk about the title for a minute. 10:37:26
24 By "tentative," do you understand it to be 10:37:28
25 preliminary? 10:37:28

1 A. If I were to say this is a tentative thing, it would 10:37:36
2 be something that would be in process, and 10:37:40
3 preliminary would be another word that would be 10:37:44
4 easily used, but tentative means that it's in the 10:37:46
5 works, we are talking about it, we are working with 10:37:48
6 it, we are trying to figure out exactly how to frame 10:37:52
7 it. 10:37:52

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8 And that's -- and I guess the other thing 10:37:58
9 I should -- I just noticed this now, it's for the 10:38:02
10 British-American Tobacco Company so it's a report to 10:38:06
11 them by these people. 10:38:06
12 Now, I don't know if these people worked 10:38:08
13 for B.A.T. or not, but it's a report prepared for 10:38:12
14 them, is the way it seems, and marked 10:38:14
15 "Confidential." 10:38:16
16 Q. By "hypothesis," do you understand that the 10:38:18
17 tentative hypothesis reflects theory as opposed to 10:38:22
18 established fact? 10:38:24
19 MS. WALBURN: Objection, form. 10:38:26
20 THE WITNESS: I don't know the context 10:38:28
21 that they were using this in, and so I really 10:38:36
22 couldn't say -- say that. 10:38:38
23 I mean, I don't know the -- words are easy 10:38:42
24 to write down and whether or not that was actually 10:38:44
25 true as far as what they were doing at that time, I 10:38:46

1 don't know. 10:38:48
2 BY MR. GALE:
3 Q. And based on your review of the document, you are 10:38:50
4 unable to tell whether it reflects theory as opposed 10:38:54
5 to established fact? 10:38:54
6 MS. WALBURN: As he sits here today? 10:38:58
7 MR. GALE: Right. 10:38:58
8 THE WITNESS: Actually, they say some 10:39:00
9 things that are pretty sound factual, particularly 10:39:06

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10 with regard to things like tolerance, "Chronic 10:39:10
11 intake of nicotine tends to restore the normal 10:39:14
12 physiologic functioning of the endocrine system so 10:39:18
13 that ever-increasing dose levels" -- again, dose 10:39:24
14 meaning like a drug dose -- "levels of nicotine are 10:39:28
15 necessary to maintain the desired action." 10:39:32
16 Now, that's -- 10:39:32
17 BY MR. GALE:
18 Q. Can you also read the next sentence, please. 10:39:34
19 A. That's not a hypothesis, that's a statement of 10:39:36
20 fact. 10:39:38
21 And it also says in the sentence before 10:39:40
22 "The hypothalamus-pituitary stimulation of nicotine 10:39:50
23 is the beneficial mechanism which makes people 10:39:54
24 smoke." 10:39:56
25 In other words, nicotine helps people to 10:39:58

1 cope with stress. That's not according to the way 10:40:00
2 they wrote this. A hypothesis is kind of a 10:40:04
3 statement of fact. I don't know what this statement 10:40:06
4 is based on, but that's what they wrote. 10:40:06
5 Q. Okay. Would you agree with me that the last 10:40:08
6 sentence of that same paragraph which reads "Unlike 10:40:12
7 other dopings, such as Morphine, the demand for 10:40:14
8 increasing dose levels is relatively" -- 10:40:18
9 A. "Slow," it says, "for nicotine." 10:40:20
10 Q. -- "slow for nicotine." 10:40:22
11 A. Uh-huh. 10:40:22
12 Q. Would you also agree that that's a statement of 10:40:24

http://legacy.library.ucsf.edu/tid/uqm35a00/pdf Source: https://www.industrydocuments.ucsf.edu/docs/rzhd0001

13 fact? 10:40:24

14 A. According to the way it's written, that's a 10:40:26

15 statement of fact. 10:40:28

16 Q. Is it a correct statement of fact? 10:40:28

17 A. Actually, no, it's not. 10:40:30

18 Q. Is it -- 10:40:32

19 A. The tolerance phenomenon to nicotine develops very 10:40:36

20 quickly, it develops more quickly than alcohol, 10:40:38

21 Morphine, opiates, and so on, so the tolerance 10:40:42

22 effect is something that occurs more rapidly. 10:40:46

23 And it's interesting that they would say 10:40:48

24 this in the context of what we just talked about 10:40:52

25 before, talking about nicotine in the sentence 10:40:54

1 before. 10:40:54

2 And then they say in the next sentence 10:40:56

3 "Unlike other dopings." Well, that's making the 10:41:00

4 connection that maybe nicotine is a doping, would be 10:41:02

5 the way that I would interpret that. 10:41:04

6 And so, as written, is what they thought 10:41:08

7 was correct at that time. 10:41:10

8 Q. Doctor, I am handing the court reporter the next 10:41:12

9 exhibit in the number. It will be 2468. It's a 10:41:18

10 published article from the journal Chest written by 10:41:22

11 Jack Henningfield and another gentleman. It's 10:41:26

12 listed on the bibliography attached to your expert 10:41:28

13 report. 10:41:32

14 (Defendants' Deposition Exhibit 2468 10:41:34

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15 was marked for identification.)

16 THE WITNESS: Are we through with this 10:41:38

17 one? 10:41:40

18 BY MR. GALE:

19 Q. Yes, sir. Doctor, my first question is going to be 10:42:04

20 regarding the second page of text. It has this 10:42:08

21 chart on it, if it helps you find it. 10:42:10

22 A. Okay. If I have reviewed this, it's been a long 10:42:14

23 time ago so I need to at least get an idea of where 10:42:16

24 this fits. 10:42:18

25 So this is only Henningfield's article? 10:42:20

1 Q. That's right. 10:42:22

2 A. It doesn't have the others attached? 10:42:26

3 Q. That's right. 10:42:28

4 A. Okay.

5 Q. It's the Henningfield article with the references. 10:42:30

6 A. Okay. And the date is -- 10:42:32

7 Q. 1988. 10:42:32

8 A. February '88. 10:42:34

9 Q. Yes, sir. 10:42:34

10 MR. DARLING: Mr. Gale, is this to be off 10:44:20

11 the record? 10:44:20

12 MR. GALE: Yes, it should be. I figured 10:44:22

13 that between the realtime on the transcript and the 10:44:24

14 video we will be able to figure out where the doctor 10:44:28

15 has taken time to review documents. 10:44:30

16 MS. WALBURN: Well, you can do all the 10:44:32

17 figuring you want but this is counting against your 10:44:34

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18 time. 10:44:34

19 There are probably thousands of articles 10:44:38

20 and documents cited in Dr. Hurt's report and I don't 10:44:40

21 think the Court is going to look very favorably on 10:44:44

22 you choosing a couple out of a predesignation of 10:44:48

23 that magnitude. 10:44:50

24 MR. WILSON: Why didn't you just designate 10:44:54

25 these in advance so we could have looked at them? 10:44:56

1 MR. GALE: We did. 10:44:58

2 MS. WALBURN: No, you didn't. You 10:45:00

3 designated his entire report and -- 10:45:02

4 MR. GALE: This is also taking up my time 10:45:04

5 on the record, which I won't do. 10:45:06

6 MS. WALBURN: Well, the witness is 10:45:08

7 reviewing a document right now, so it won't take any

8 time, as you well know. 10:45:10

9 MR. GALE: Okay. I predesignated what he 10:45:12

10 had marked -- that he had reviewed, I predesignated 10:45:14

11 what he had attached to his expert report as things 10:45:18

12 that he relied upon. 10:45:20

13 MS. WALBURN: And that is a predesignation 10:45:20

14 that is far beyond what has been the norm in 10:45:24

15 predesignation in this litigation. 10:45:26

16 And I will put the defendants on notice, 10:45:28

17 and I would appreciate it if you spread it among 10:45:30

18 your co-counsel, that whatever rules apply to our 10:45:32

19 witness -- our expert witness depositions are going 10:45:36

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20 to apply to yours, as well. 10:45:40

21 BY MR. GALE:

22 Q. Have you had a chance to review it, Doctor? 10:45:42

23 A. Yeah, I have looked at it all, but this is not a 10:45:46

24 simple paper, you know, it's several pages long, 10:45:50

25 and -- you know, it's 20 pages long, so I have 10:45:54

1 scanned it. I mean, I don't know how much time I 10:45:56

2 have taken but I haven't taken very much time. 10:45:58

3 The ones that I am familiar with, I think 10:46:00

4 you already realized, if I had reviewed this 10:46:02

5 yesterday I would just look at it and we would go 10:46:04

6 on. This is a little bit more complicated than 10:46:08

7 that. 10:46:08

8 Q. Okay. Well, I want -- let me ask you a focused 10:46:08

9 question. Maybe this will help. 10:46:10

10 On the second page of text -- you are 10:46:16

11 there with me, I see? 10:46:18

12 A. Yep, the figures, Figure 1. 10:46:22

13 Q. Under the heading Drug Dependence, about 10:46:24

14 three-quarters of the way down that first paragraph 10:46:26

15 there is a statement, "Drug dependence does not 10:46:30

16 differ from habitual or compulsive behaviors, but 10:46:40

17 rather is a subset of habitual or compulsive 10:46:42

18 behaviors in which the role of a specific 10:46:44

19 exogenously administered centrally active chemical 10:46:48

20 is critical." 10:46:50

21 Do you see where I am? 10:46:52

22 A. Uh-huh. 10:46:52

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23 Q. Do you agree with that statement? 10:46:54

24 A. I need to read what comes before it, first. I agree 10:47:14

25 with the first part, drug dependence is synonymous 10:47:18

1 with drug addiction. 10:47:18

2 Q. Okay. I am asking specifically about the sentence 10:47:20

3 that I read. 10:47:22

4 A. I know, but I need to know the context in which this 10:47:24

5 sentence you are asking me to express an opinion 10:47:26

6 about is given, and so I am reading through it to do 10:47:30

7 that. 10:47:30

8 I will not express an opinion about a 10:47:30

9 sentence out of context. I just won't do that. 10:47:34

10 Q. Okay. 10:47:36

11 A. And they chose the word "drug dependence" used 10:47:42

12 throughout this paper. "Drug dependence may be 10:47:52

13 defined as a substance-seeking behavior involving a 10:47:54

14 psychoactive drug that acts in the central nervous 10:47:56

15 system. Tolerance and physiological withdrawal may 10:48:00

16 or may not be present." 10:48:04

17 And in the sentence you are talking about 10:48:06

18 is "Drug dependence does not differ from habitual or 10:48:10

19 compulsive behaviors, rather is a subset of habitual 10:48:14

20 or compulsive behaviors in which the role of a 10:48:14

21 specific exogenously administered, centrally active 10:48:18

22 chemical is critical." 10:48:22

23 Is that the question? 10:48:22

24 Q. Yes, sir. 10:48:22

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25 A. I don't know that I would conceptualize it quite 10:48:24

1 that way, but from my perspective, drug dependence 10:48:26
2 or drug addiction, or in this case, nicotine 10:48:38
3 addiction or nicotine dependence, the drug is the 10:48:42
4 central part. You take out the drug and you don't 10:48:44
5 have the centrally acting part of this. 10:48:46
6 There are compulsive parts to smoking 10:48:50
7 behavior or the use of nicotine, and I think that's 10:48:56
8 well known, but the real central issue is what 10:48:58
9 nicotine delivered by via cigarettes, in this case, 10:49:02
10 does to the central nervous system, and that part I 10:49:06
11 totally agree with. 10:49:06
12 Whether or not it's a subset of all 10:49:08
13 other types of habitual or compulsive behaviors, 10:49:12
14 drug addiction or nicotine addiction has other -- 10:49:16
15 there is a compulsive part to that. But the central 10:49:20
16 issue is the drug. 10:49:22
17 Q. Would you agree with me that behaviors can be 10:49:24
18 compulsive even when no drug is involved? 10:49:26
19 A. I think that's what this document says, that there 10:49:30
20 are compulsive behavior disorders without a drug, 10:49:34
21 but I -- 10:49:36
22 Q. Do you believe that to be true? 10:49:42
23 A. I think that's well known, that there are compulsive 10:49:46
24 behaviors that do not involve a drug. When you are 10:49:46
25 talking about addictive behaviors, you are talking 10:49:48

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about behaviors that involve a drug, a centrally 10:49:50
acting drug that has tolerance, withdrawal symptoms, 10:49:52
which nicotine clearly does and has had for as long 10:49:56
as we have known. 10:49:56
Q. Okay. We are about to run out of tape. Let me ask 10:49:58
one more question. We will see if we can get this 10:50:02
done before we change the tape. 10:50:04
I want to draw your attention to 10:50:06
Figure 1. 10:50:06
A. Okay. 10:50:06
Q. Do you believe that Figure 1 is an accurate 10:50:08
representation of the relationship of drug 10:50:12
addictions to habitual or compulsive behaviors? 10:50:16
A. I think it's an oversimplification of the magnitude 10:50:22
of the problem. People have obsessive compulsive 10:50:28
behavior, which is a -- which is a psychiatric 10:50:30
disorder, have significant problems because of their 10:50:34
obsessive compulsive behavior, but they don't die of 10:50:38
lung cancer and heart disease and emphysema. 10:50:42
So in the context of making this the 10:50:44
smallest box in this all -- this whole box, I think 10:50:46
it's a misrepresentation of the magnitude of the 10:50:50
differentials as far as the problem. 10:50:52
He talks about habitual TV watching here. 10:50:56
I don't know of anyone that has ever gotten lung 10:50:58

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1 cancer from watching television. It is a compulsive 10:51:00
2 behavior, right, but the box that it's in is bigger 10:51:04
3 than the one that drug addiction is in. 10:51:06
4 So the way that this -- I would not have 10:51:08
5 constructed this in this way. 10:51:10
6 Q. Okay. Let me ask the question a little bit 10:51:12
7 differently. 10:51:12
8 Do you agree that drug addiction is a 10:51:16
9 subset of habitual or compulsive behaviors, 10:51:20
10 generally? 10:51:20
11 MS. WALBURN: Objection, form and asked 10:51:24
12 and answered. 10:51:24
13 THE WITNESS: The way I view this is that 10:51:28
14 drug dependence, nicotine dependence, there is a 10:51:32
15 compulsive part to that, but whether or not it fits 10:51:36
16 in as a subset of other compulsive behaviors as it's 10:51:40
17 drawn here, I would not draw it that way because of 10:51:42
18 the magnitude of the health and disability problems 10:51:46
19 related to cigarette smoking. 10:51:48
20 MR. GALE: Okay. I believe we are at the 10:51:50
21 end of the videotape. Why don't we take a short 10:51:54
22 break while he changes the tape. 10:51:54
23 VIDEOGRAPHER: This concludes the fifth 10:52:02
24 tape in the deposition of Dr. Richard Hurt. The 10:52:08
25 time is now 10:52 a.m. 10:52:12

1 (A recess was taken.) 10:56:24
2 VIDEOGRAPHER: This is the beginning of 10:58:36
3 the sixth videotape in the videotaped deposition of 10:58:38

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4 Dr. Hurt. The time is now 10:58 a.m. 10:58:42
5 MR. GALE: I am going to pass the witness 10:58:46
6 at this time. I want to make clear for the record 10:58:48
7 that I have additional questions I would like to ask 10:58:50
8 Dr. Hurt. 10:58:52
9 Based on his manner of responding to 10:58:54
10 questions, both by myself and other counsel, and the 10:58:56
11 way that he has gone about looking at documents that 10:59:00
12 I have handed to him, I believe that my time has 10:59:02
13 been artificially shortened. 10:59:04
14 Having said that, I don't want to use that 10:59:06
15 against my co-counsel, and I know that they have 10:59:08
16 questions that they need to ask specific to their 10:59:12
17 clients for this case. 10:59:14
18 So I just want to let you know that we may 10:59:18
19 go to the Court to try to seek further time with 10:59:20
20 Dr. Hurt in the future. I just don't want there to 10:59:24
21 be any confusion about that. 10:59:26
22 MS. WALBURN: Let's move on with the 10:59:26
23 speeches. The record is clear not only did you 10:59:28
24 predesignated everything listed or cited in 10:59:28
25 Dr. Hurt's report, but you predesignated everything 10:59:30

1 listed or cited in the expert reports of two of 10:59:34
2 defendants' experts. I believe it's possibly the 10:59:36
3 most massive predesignation in this litigation to 10:59:38
4 date. 10:59:40
5 Can we proceed? 10:59:40

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6

7 EXAMINATION 10:59:44

8 BY MR. McDONNELL:

9 Q. Dr. Hurt? I am Alf McDonnell, and I am representing 10:59:48

10 Philip Morris. 10:59:48

11 How are you today? 10:59:52

12 A. I am well. 10:59:52

13 Q. Are you in a good mood? 10:59:54

14 A. As good as it's going to get. 10:59:56

15 Q. What is your understanding, Dr. Hurt, of why 11:00:02

16 Mr. Berens is here? 11:00:04

17 MR. BERENS: Objection to that question. 11:00:06

18 It seeks privilege information, and Dr. Hurt will 11:00:12

19 not be answering the question. 11:00:12

20 MR. McDONNELL: Well, there is a case 11:00:14

21 management order that requires him at least to 11:00:18

22 answer the question -- the questions I intend to put 11:00:22

23 to him. 11:00:22

24 BY MR. McDONNELL:

25 Q. Is it your understanding that Mr. Berens is here 11:00:24

1 representing you today? 11:00:26

2 MR. BERENS: You may answer that 11:00:30

3 question. 11:00:30

4 THE WITNESS: That's correct. 11:00:32

5 BY MR. McDONNELL:

6 Q. Do you understand that he is also here representing 11:00:36

7 Mayo Clinic? You can answer. 11:00:42

8 MR. BERENS: You may answer. 11:00:44

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9 THE WITNESS: That's correct. That's who 11:00:48
10 I work for. 11:00:58
11 BY MR. McDONNELL:
12 Q. Is it your understanding that Mayo Clinic's 11:01:00
13 interests and the interests of Ms. Walburn's clients 11:01:04
14 may not be aligned precisely? 11:01:08
15 MR. BERENS: Object to that question -- 11:01:12
16 MS. WALBURN: Objection. 11:01:12
17 MR. BERENS: Objection, calls for 11:01:14
18 privilege information. Dr. Hurt will not be 11:01:18
19 answering that question. 11:01:20
20 BY MR. McDONNELL:
21 Q. Do you decline -- do you decline to answer that 11:01:26
22 question, Doctor? 11:01:26
23 MR. BERENS: Dr. Hurt will not be 11:01:30
24 answering that question. 11:01:30
25 MR. McDONNELL: I am going to ask Dr. Hurt 11:01:32

1 if he -- you are not testifying, Mr. Berens. 11:01:34
2 BY MR. McDONNELL:
3 Q. Dr. Hurt, do you decline, on counsel's advice, to 11:01:36
4 answer that question? 11:01:36
5 MR. BERENS: Counsel, this is in the state 11:01:38
6 of Minnesota. I am registering my objections, 11:01:42
7 making the statements in accordance with custom and 11:01:42
8 practice here. You are not admitted to practice 11:01:44
9 here, I am. Please proceed. 11:01:46
10 BY MR. McDONNELL:

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11 Q. Dr. Hurt, will you be declining to answer that 11:01:50
12 question, yes or no? 11:01:54
13 MR. BERENS: Dr. Hurt will not answer that 11:01:56
14 question, Counsel. Please proceed with substantive 11:01:58
15 questions. 11:02:00
16 BY MR. McDONNELL:
17 Q. My question, just to make it so the record is clear, 11:02:02
18 is do you decline to answer the question I put to 11:02:04
19 you on the basis of Mr. Berens' statements? 11:02:08
20 MR. BERENS: Dr. Hurt will not be 11:02:10
21 answering that question, Counsel. You are harassing 11:02:14
22 this witness and me and you are not complying with 11:02:16
23 Minnesota practice. 11:02:16
24 BY MR. McDONNELL:
25 Q. Dr. Hurt, do you have any concerns about your own 11:02:20

1 personal civil liability as a result of something 11:02:24
2 you may say in this deposition? 11:02:26
3 MS. WALBURN: Objection. 11:02:26
4 MR. BERENS: Objection. 11:02:28
5 BY MR. McDONNELL:
6 Q. You may answer, Doctor. 11:02:30
7 A. Do I have concern of my personal liability? With as 11:02:36
8 many people around this table and as many of you 11:02:38
9 have law degrees, personal liability is something 11:02:42
10 everybody worries about. 11:02:44
11 Q. What about -- is Mr. Berens here at your request? 11:02:54
12 MR. BERENS: Objection, calls for 11:02:56
13 privilege information. Dr. Hurt will not be 11:03:00

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14 answering that question. 11:03:02

15 BY MR. McDONNELL:

16 Q. I will just repeat it one more time. 11:03:04

17 Is Mr. Berens here at your request, 11:03:08

18 Doctor? That's not -- that does not call for 11:03:08

19 privileged information. 11:03:10

20 MR. BERENS: Objection, calls for 11:03:12

21 privileged information. Dr. Hurt will not be 11:03:14

22 answering that question. 11:03:28

23 BY MR. McDONNELL:

24 Q. Dr. Hurt, have you had any communications with 11:03:30

25 Mr. Berens prior to the deposition today? 11:03:32

1 MR. BERENS: Objection, calls for 11:03:34

2 privilege information. Dr. Hurt will not be 11:03:36

3 answering that question. 11:03:38

4 MR. McDONNELL: I just -- I am not going 11:03:40

5 to proceed and have Mr. Berens keep saying the same 11:03:44

6 thing. 11:03:44

7 I do want to note that the case management 11:03:48

8 order says "When a privilege is claimed, the witness 11:03:50

9 shall, nevertheless, answer questions relevant to 11:03:54

10 the existence, extent or waiver of the privilege, 11:03:58

11 such as the date of a communication, who made the 11:04:00

12 communication, to whom and whose presence the 11:04:04

13 communication was made, and the identity of other 11:04:06

14 persons to whom the contents of the communication 11:04:08

15 have been disclosed, and the general subject matter 11:04:12

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16 of the statements unless such information, itself, 11:04:14
17 is privileged." 11:04:14
18 And I just -- 11:04:16
19 MR. BERENS: Counsel, if you ask -- 11:04:18
20 MR. McDONNELL: Let me finish, please, 11:04:20
21 Mr. Berens. 11:04:20
22 MR. BERENS: If you ask questions along 11:04:22
23 those lines -- 11:04:22
24 MR. McDONNELL: Mr. Berens, let me finish, 11:04:24
25 please. 11:04:24

1 MR. BERENS: I am going to make this really 11:04:26
2 easy for you. 11:04:28
3 MR. McDONNELL: Will you let me finish 11:04:28
4 what I am saying? 11:04:30
5 MR. BERENS: You haven't started yet.
6 MR. McDONNELL: Yes, I have, and I am in 11:04:30
7 the middle of it. 11:04:32
8 MR. BERENS: If you ask questions along 11:04:32
9 the lines of the order, there will not be an 11:04:34
10 objection. 11:04:34
11 MR. McDONNELL: I asked questions along 11:04:36
12 the lines of the order and you -- 11:04:38
13 MR. BERENS: Try again.
14 MR. McDONNELL: Do you want to withdraw 11:04:40
15 the objections that you made?
16 MR. BERENS: No, I want you to ask 11:04:42
17 questions along the lines of the order. 11:04:42
18 MR. McDONNELL: I did. 11:04:42

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19 BY MR. McDONNELL:

20 Q. Have you had any communications with Mr. Berens 11:04:44

21 prior to the deposition today? 11:04:46

22 MR. BERENS: You can answer that question. 11:04:48

23 MR. McDONNELL: Well, I would note for the 11:04:50

24 record Mr. Berens seems to have changed his mind. 11:04:54

25 BY MR. McDONNELL:

1 Q. You may answer that question, Dr. Hurt. 11:04:56

2 MR. BERENS: Counsel, is your hand shaking 11:05:00

3 because you are nervous or because you are 11:05:02

4 threatening the witness? 11:05:02

5 MR. McDONNELL: No, because I am angry. 11:05:04

6 MR. BERENS: Fair enough.

7 THE WITNESS: So what was the question? 11:05:06

8 BY MR. McDONNELL:

9 Q. Have you had any communications with Dr. -- with 11:05:10

10 Mr. Berens prior to your deposition today? 11:05:12

11 MR. BERENS: You may answer that question. 11:05:14

12 THE WITNESS: Yes. 11:05:16

13 BY MR. McDONNELL:

14 Q. On what occasions? 11:05:16

15 A. Yesterday, last week. Before then, I am sure. What 11:05:28

16 extent do you want me to answer that question? I 11:05:30

17 mean, you asked the question have I had them? Yes, 11:05:34

18 I have. 11:05:34

19 Q. Have you had communications relevant to the matter 11:05:38

20 of your appearance today? 11:05:40

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21 MS. WALBURN: Again, that calls for a yes 11:05:42
22 or no. 11:05:44
23 THE WITNESS: Relevant in what way? 11:05:46
24 MR. McDONNELL: Are you coaching the 11:05:48
25 witness? He can tell whether it calls for a yes or 11:05:50

1 no. 11:05:50
2 MS. WALBURN: Excuse me, Counsel. I am 11:05:52
3 allowed to make proper objections and proper remarks 11:05:54
4 on the record, and as you know, you are getting into 11:05:56
5 areas of privilege where diligence must be 11:06:02
6 exercised, particularly given the vague nature of 11:06:04
7 your questions. 11:06:04
8 MR. McDONNELL: I didn't hear -- well, 11:06:08
9 your point was it could be answered yes or no, and I 11:06:08
10 didn't hear an objection. 11:06:10
11 BY MR. McDONNELL:
12 Q. Have you had a conversation with Mr. Berens that 11:06:16
13 related to the subject of your appearance for 11:06:20
14 deposition today? 11:06:20
15 MS. WALBURN: And again, that question can 11:06:24
16 be answered yes or no. 11:06:24
17 MR. McDONNELL: I object to counsel's 11:06:26
18 colloquy, move to strike it. 11:06:28
19 THE WITNESS: What's a colloquy? 11:06:32
20 MR. McDONNELL: You don't have to worry 11:06:34
21 about that, Doctor, not asking you about colloquy. 11:06:36
22 THE WITNESS: Well, it helps to understand 11:06:36
23 the language. 11:06:38

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24 BY MR. McDONNELL:

25 Q. You don't have to worry about what goes on between 11:06:40

1 counsel. I asked you a question. Have you had a 11:06:42

2 conversation with Mr. Berens relating to the subject 11:06:44

3 matter -- I am sorry, relating to the fact of your 11:06:50

4 appearance for deposition, yes or no? 11:06:52

5 A. I have had a conversation with Mr. Berens related to 11:06:58

6 my appearance in this deposition. 11:06:58

7 Q. More than one? 11:06:58

8 A. More than one. 11:06:58

9 Q. How many? 11:07:00

10 A. I don't know. 11:07:00

11 Q. Extending back how long? 11:07:08

12 MS. WALBURN: Objection, form. 11:07:10

13 THE WITNESS: I really don't know how long 11:07:16

14 or how -- when the first encounter was. I really 11:07:20

15 don't know. I don't keep track of that sort of 11:07:24

16 thing. 11:07:26

17 BY MR. McDONNELL:

18 Q. Was it in the last three months? 11:07:28

19 A. I have had conversations with Mr. Berens in the 11:07:30

20 last -- within the last three months, yeah. 11:07:32

21 Q. Which -- now, what you said a moment ago is I can't 11:07:36

22 remember when the first one occurred. Did the first 11:07:38

23 one occur within the last three months? 11:07:40

24 A. I think it was beyond -- it was before that. 11:07:42

25 Q. Before the last three months? 11:07:44

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1 A. Uh-huh. 11:07:44
2 Q. Before the period of the last six months? 11:07:50
3 MS. WALBURN: Objection, form. 11:07:50
4 THE WITNESS: I think so, but I am not 11:08:00
5 really certain. It's been sometime in the memorable 11:08:04
6 past, but I couldn't put a date to it. 11:08:08
7 BY MR. McDONNELL:
8 Q. Do you recall whether the first contact which 11:08:14
9 related to your appearance here -- your first 11:08:18
10 contact with Mr. Berens that related to your 11:08:22
11 appearance as a witness for this deposition was 11:08:24
12 initiated by you or initiated by Mr. Berens? 11:08:28
13 A. The first contact was initiated by our legal staff. 11:08:40
14 I didn't know Mr. Berens. 11:08:42
15 Q. All right. And your first contact with Mr. Berens, 11:08:48
16 was that initiated by you or by Mr. Berens? 11:08:50
17 A. My first contact with Mr. Berens was initiated by 11:08:54
18 our legal staff. 11:08:56
19 Q. And how did that happen? Did they bring you down 11:09:06
20 and introduce you to Mr. Berens or -- 11:09:12
21 A. The first time I met with Mr. Berens I was with one 11:09:14
22 of our legal staff. 11:09:16
23 Q. I see. And the idea of meeting with Mr. Berens was 11:09:22
24 initiated by the person on your legal staff? 11:09:30
25 MS. WALBURN: Objection, asked and 11:09:32

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1 answered.
2 THE WITNESS: That's what I said earlier. 11:09:34
3 BY MR. McDONNELL:
4 Q. I didn't understand you to have said that earlier. 11:09:36
5 Can you recall how many meetings you may 11:09:40
6 have had with Mr. Berens? 11:09:42
7 A. Not in specific terms, no. 11:09:48
8 Q. Well, in rough terms? 11:09:50
9 A. Several. 11:09:52
10 Q. More than five? 11:09:54
11 A. That's several. I -- more than five, probably, 11:10:00
12 yeah. 11:10:00
13 Q. More than ten? 11:10:02
14 A. I really can't tell. It was several meetings, but I 11:10:06
15 can't tell you exactly how many. 11:10:08
16 Q. Could it have been more than ten? 11:10:10
17 MS. WALBURN: Objection, calls for 11:10:12
18 speculation. 11:10:12
19 THE WITNESS: I mean, it's -- 11:10:14
20 BY MR. McDONNELL:
21 Q. It's possible? 11:10:16
22 A. More than 5, less than 500. I mean, I don't know 11:10:20
23 how many it was because I don't keep track of those 11:10:20
24 sorts of things. 11:10:22
25 Q. Somewhere between 5 and 500? 11:10:24

1 A. That was a number I threw out to make sure it 11:10:28

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2 included every possibility. 11:10:30

3 Q. All the meetings? 11:10:32

4 A. Or you could make it 500,000 and that would really 11:10:36

5 encompass them all, but it's been several meetings 11:10:38

6 but I couldn't tell you how many. 11:10:40

7 Q. Who was present at the meetings? 11:10:44

8 MS. WALBURN: Objection, form. 11:10:46

9 THE WITNESS: Which meetings? I mean, 11:10:48

10 there -- 11:10:50

11 BY MR. McDONNELL:

12 Q. Well, can you recall whether there was different -- 11:10:52

13 there were different people present at different 11:10:54

14 meetings? 11:10:54

15 A. Yeah, there were different people present at 11:10:58

16 different meetings with Mr. Berens. 11:11:00

17 Q. Who were the people that were present at some of the 11:11:04

18 meetings? 11:11:04

19 A. The counsel, Mayo counsel, and Mr. Berens and I were 11:11:10

20 together probably the first meeting, and then we 11:11:16

21 have had meetings, the two of us, and we have had 11:11:18

22 meetings when Mr. Wilson and Ms. Walburn were 11:11:22

23 present. 11:11:22

24 Q. Uh-huh. 11:11:24

25 A. Those are the people that I would remember. I think 11:11:36

1 that's -- I think that's all, but I -- 11:11:38

2 Q. Can you remember anyone else who may have been 11:11:46

3 present at any of the meetings, that is, anyone 11:11:48

4 other than Mr. Berens, yourself, members of the Mayo 11:11:52

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5 Clinic's legal staff and representatives of the 11:11:56
6 Robins, Kaplan law firm? 11:12:00
7 MS. WALBURN: Objection, asked and 11:12:02
8 answered. 11:12:02
9 THE WITNESS: I have just given you the 11:12:04
10 listing of the people that I can remember. I don't 11:12:06
11 recall any others. 11:12:10
12 BY MR. McDONNELL:
13 Q. Doctor, I want to follow up a little bit on 11:12:12
14 something you said yesterday. 11:12:14
15 Do you recall saying early in your 11:12:18
16 deposition yesterday that the tobacco companies are 11:12:20
17 the only people who would not classify nicotine as 11:12:22
18 addictive? I can show you it if you want, but -- 11:12:28
19 MS. WALBURN: Well, objection, form. And 11:12:30
20 I will also note that it appears that counsel is 11:12:32
21 proceeding contrary to the case management orders 11:12:36
22 and the specific statements of defense counsel 11:12:40
23 yesterday that each independent counsel would not be 11:12:44
24 covering that ground in the deposition. 11:12:48
25 MR. McDONNELL: I want to ask him about 11:12:50

1 something he alluded to yesterday but he was not 11:12:52
2 examined on. 11:12:54
3 MS. WALBURN: Well, my objection stands. 11:12:54
4 MR. McDONNELL: Your objection does 11:12:56
5 stand. 11:12:58
6 MS. WALBURN: Do you have a page cite? 11:13:02

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7 MR. McDONNELL: Page 20 of yesterday's 11:13:06
8 deposition. 11:13:06
9 THE WITNESS: Let me do one other thing 11:13:14
10 before you get to that. Okay. 11:13:28
11 MS. WALBURN: (Indicating). 11:13:30
12 THE WITNESS: Yeah, I see what you are 11:13:46
13 saying. Yep. 11:13:48
14 BY MR. McDONNELL:
15 Q. And is that your view? 11:13:50
16 A. "Only" is a big word. That's my view, as I said in 11:13:54
17 my report. I am not aware of any organization 11:13:58
18 outside of the tobacco industry. I didn't say the 11:14:00
19 tobacco industry and its supporters, but that's what 11:14:04
20 I said yesterday, which does not accept the fact 11:14:10
21 that nicotine is addictive or which disputes the 11:14:12
22 fact that nicotine is addictive. 11:14:14
23 Q. Do you remember -- 11:14:14
24 A. I reflect back on my report. 11:14:16
25 Q. Do you remember the meeting of the Drug Abuse 11:14:20

1 Advisory Committee to the Food and Drug 11:14:24
2 Administration that -- to which you made a 11:14:26
3 presentation on August 2nd, 1994? 11:14:28
4 A. You know the date better than I do. If it was 11:14:32
5 August the 2nd, I was there, but I -- it was in 11:14:34
6 August of '94, but I couldn't tell you the date. 11:14:38
7 Q. The Holiday Inn in Silver Spring, Maryland. Does 11:14:42
8 that sound right? 11:14:42
9 A. It could be. 11:14:46

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10 Q. Do you recall that the committee was a committee of 11:14:50
11 distinguished scholars that Dr. Kessler had 11:14:56
12 assembled for the purpose of considering certain 11:14:58
13 questions relating to nicotine and cigarette 11:15:00
14 smoking? 11:15:00
15 A. Well, as I recall the meeting, it was -- there were 11:15:06
16 two days. I don't know which day the 2nd was on but 11:15:08
17 there were two meetings. One was to review the 11:15:12
18 nicotine nasal spray as a new drug delivery device 11:15:14
19 for nicotine and to review it before this committee, 11:15:20
20 which was the Drug Abuse Advisory Committee, I think 11:15:22
21 the name of it is for that purpose. 11:15:24
22 And then the second day had to do with 11:15:26
23 nicotine addiction or nicotine dependence and there 11:15:32
24 were people who presented at that meeting, and I was 11:15:34
25 one of them that presented at both meetings, I 11:15:38

1 presented on the first day and the second day. 11:15:40
2 Q. I understand. 11:15:44
3 Do you remember one of the members of the 11:15:46
4 committee, a Dr. Lawrence Brown? 11:15:50
5 A. Without going back and looking at the minutes of the 11:15:56
6 meeting, that's -- you know, that's three years ago 11:15:58
7 and I can't recall which one was Lawrence Brown and 11:16:06
8 what he might have said. 11:16:08
9 My focus really was to present to the 11:16:12
10 committee -- 11:16:14
11 Q. I understand. 11:16:14

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12 A. -- my information, and was not to be there to record 11:16:16
13 or to learn all the other things that were there. 11:16:22
14 It was -- my job was really to make a presentation. 11:16:24
15 That's what I was there for. 11:16:26
16 Q. Do you remember that at the conclusion of the 11:16:30
17 presentations Dr. Kessler put several questions to 11:16:32
18 members of the committee? Do you recall that? 11:16:36
19 A. Well, the second day Dr. Kessler was there. I don't 11:16:40
20 recall him being there the first day. 11:16:42
21 Q. I am talking about the second day, Doctor. 11:16:44
22 A. Well, it was a meeting of two days. 11:16:46
23 Q. I understand that. I am talking about the second 11:16:46
24 day. 11:16:48
25 A. You are talking about the second day? 11:16:48

1 Q. Yes. 11:16:50
2 MS. WALBURN: Excuse me, Counsel. 11:16:52
3 MR. McDONNELL: I just want to make it 11:16:52
4 clear to him that I'm talking about the second day. 11:16:54
5 THE WITNESS: Well, it wasn't clear up 11:16:56
6 until now, so -- 11:16:56
7 BY MR. McDONNELL:
8 Q. Sorry. 11:16:58
9 A. So the second day Dr. Kessler was there. The first 11:17:00
10 day I don't recall him being there, and I recall him 11:17:04
11 giving out a series of questions but I -- I can't 11:17:06
12 remember the exact content of those. 11:17:10
13 Q. Do you remember -- does it jog your memory if I 11:17:12
14 tell you that the first question was whether the 11:17:14

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15 members of the panel agreed with the Surgeon 11:17:16
16 General's -- I am sorry, with the Food and Drug 11:17:18
17 Administration's -- strike that. Start over. 11:17:22
18 Now do you recall that the first question 11:17:24
19 that he put to the members of the panel was whether 11:17:28
20 the members of the panel agreed with the Surgeon 11:17:32
21 General's conclusion in his 1988 Surgeon General's 11:17:36
22 Report that nicotine was addictive? 11:17:40
23 MS. WALBURN: Objection, asked and 11:17:42
24 answered. 11:17:42
25 BY MR. McDONNELL:

1 Q. You don't remember? 11:17:44
2 A. That could have been one of the questions. I know 11:17:46
3 it was about the addictive nature of nicotine, 11:17:48
4 that's what the whole day was about, and there were 11:17:50
5 presentations by people from the scientific 11:17:54
6 community, there were presentations by 11:17:56
7 representatives of the tobacco industry, including a 11:17:58
8 guy by the name of Robinson and two other people, 11:18:00
9 and it was -- I can't recall the exact questions 11:18:06
10 that he posed. I am sure it's recorded somewhere 11:18:08
11 and maybe you have it, and if you would show it to 11:18:10
12 me I could look at it and tell you if that's what I 11:18:14
13 remember.
14 Q. Well, I don't have it. I do have the description of 11:18:18
15 the participants, and I am not asking you about 11:18:20
16 the -- what you call the representatives of the 11:18:22

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17 tobacco industry who made presentations. I am 11:18:24
18 asking about the views of the people on the Drug 11:18:28
19 Abuse Advisory Committee appointed by Dr. Kessler. 11:18:30
20 A. I am not sure that they were appointed by 11:18:34
21 Dr. Kessler. I don't know who appoints those 11:18:36
22 people. 11:18:36
23 Q. Do you -- 11:18:38
24 A. Maybe he did but -- 11:18:38
25 Q. I will represent to you that he decides who 11:18:40

1 participates on the Drug Abuse Advisory Committee 11:18:46
2 but it's not important to my question. 11:18:48
3 Do you know who Dr. Richard Meish (ph) is? 11:18:52
4 A. That doesn't ring a bell right off the top of my 11:18:54
5 head. 11:18:54
6 Q. All right. And I take it you can't -- I am not 11:18:58
7 going to ask you about it if you can't recall, but I 11:19:00
8 take it you can't recall any of the comments that 11:19:02
9 the individual members of this committee, which was 11:19:06
10 convened by Dr. Kessler, made about the question of 11:19:08
11 whether nicotine was addictive? 11:19:10
12 A. Can I recall specific comments? 11:19:14
13 Q. Yes. 11:19:14
14 A. Too long ago. I -- 11:19:16
15 Q. Okay. 11:19:16
16 A. I can't recall it. But there is a transcript of 11:19:18
17 that, I am sure. 11:19:20
18 Q. There is. 11:19:20
19 A. And we can look at that. 11:19:22

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20 Q. There is. There is. I don't -- I could tell you 11:19:24
21 what it says, but -- from memory, but that wouldn't 11:19:36
22 be very productive, I think. You would just say I 11:19:38
23 would have to see the transcript; would that be 11:19:40
24 right?
25 A. You got that right. 11:19:40

1 Q. So we'll do that another time, Doctor. 11:19:42
2 Did I understand yesterday your testimony 11:19:44
3 to be that -- well, let me strike that. 11:19:46
4 Is it your view that nicotine, as it's 11:19:48
5 contained in cigarette smoke, interferes with 11:19:50
6 rational thought? 11:19:56
7 MS. WALBURN: Objection, form. 11:19:58
8 THE WITNESS: Rational thought? What does 11:20:04
9 that mean? I mean, it's -- and I am just not sure 11:20:06
10 of the context of your question. Rational thought 11:20:10
11 means we are sitting in this room rationally 11:20:12
12 thinking? 11:20:14
13 Rationalization is one thing that plays 11:20:18
14 into the addictive part of nicotine as it's 11:20:22
15 delivered via cigarettes. 11:20:24
16 And so rationalization is part of the 11:20:28
17 process of addiction, and so in that sense, a person 11:20:34
18 who continues to use a drug of dependence, despite 11:20:40
19 having adverse consequences, would be thought by 11:20:42
20 other people to be irrational, whereas the real 11:20:46
21 reason is that they are practicing rationalization 11:20:48

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22 and denial. 11:20:50

23 I mean, I am not sure of the context that 11:20:52

24 you are asking this. 11:20:54

25 BY MR. McDONNELL:

1 Q. I am just trying to understand your testimony of 11:20:56

2 yesterday. 11:20:56

3 MR. McDONNELL: Could you put before 11:20:58

4 Dr. Hurt page 56 of yesterday's transcript. 11:21:04

5 MS. WALBURN: Can I ask, Counsel, if you 11:21:06

6 or any of your co-counsel have another copy of the 11:21:08

7 deposition because -- 11:21:10

8 MR. McDONNELL: I don't. 11:21:12

9 MS. WALBURN: -- because I only have one 11:21:14

10 copy. 11:21:16

11 MR. LOSS: I didn't receive one. 11:21:16

12 MR. McDONNELL: We will do our best. 11:21:22

13 MS. WALBURN: What line are you on? 11:21:26

14 MR. McDONNELL: Let's -- the witness gives 11:21:26

15 a response that starts on Line 12, and the sentence 11:21:28

16 goes on quite a while up to Line 21. 11:21:38

17 MS. WALBURN: We appear to have a 11:21:40

18 different version. 11:21:42

19 MR. McDONNELL: Just one second here. If 11:22:18

20 I can't find it quickly, I will move right on. 11:22:20

21 MR. DARLING: Do you know, was that 11:22:32

22 printed off of -- yours printed off the synchronized 11:22:34

23 transcript? 11:22:34

24 MS. WALBURN: I have no idea. 11:22:36

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25 MR. DARLING: Ours was not, and so that 11:22:42

1 may account -- 11:22:42
2 MR. McDONNELL: Well, let me give you -- 11:22:58
3 if you would just read your response there as it 11:23:00
4 appears on -- beginning on Line 12. Would you read 11:23:04
5 it into the record so -- 11:23:06
6 MS. WALBURN: I am sure you don't mind, 11:23:06
7 Counsel, if I look on. 11:23:08
8 MR. McDONNELL: I don't mind a bit. 11:23:12
9 THE WITNESS: Can I see what comes before 11:23:14
10 this and what comes after it? I need to know the 11:23:16
11 context of when I did this. 11:23:16
12 BY MR. McDONNELL:
13 Q. Sure, but would you read it first into the record 11:23:20
14 and then I'll give you all you want. 11:23:20
15 MS. WALBURN: Well, could we have the 11:23:22
16 prior page? 11:23:22
17 THE WITNESS: I need to see the context of 11:23:24
18 it.
19 MR. McDONNELL: He won't read it into the 11:23:26
20 record until he has it? 11:23:26
21 THE WITNESS: Is that an unreasonable 11:23:28
22 request? You got the pages in front of it. 11:23:28
23 BY MR. McDONNELL:
24 Q. No, it's a time-wasting request. 11:23:30
25 A. So 55, 6. Okay. So what did you want me to do? 11:23:48

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1 Excuse me. What did you want me to do? 11:23:50
2 Q. I asked you if you would please read your response 11:23:54
3 that begins on Line 12, page 56, of the materials 11:23:58
4 just handed to you. 11:24:00
5 Q. Okay. Read that sentence. 11:24:02
6 A. "THE WITNESS: Nicotine addiction is the drug we are 11:24:08
7 talking about. And when you have a drug involved in 11:24:08
8 a dependence-producing process, then it basically 11:24:26
9 takes over up here," pointing to my head is what I 11:24:28
10 did, "to the exclusion of even rational thought 11:24:32
11 because denial and rationalization" -- I don't 11:24:36
12 know -- 11:24:36
13 Q. I wrote that in. I am trying to make sense out of 11:24:40
14 it. Right. You don't have to accept my -- 11:24:42
15 A. Well, it's certainly better than what was here. 11:24:44
16 Q. I thank you. 11:24:46
17 A. Well I think "hook into that" is what I did say, 11:24:50
18 that rationalization hooks into that. 11:24:52
19 "So it really alters all of those other 11:24:56
20 things that I think you are trying to get at," and 11:24:58
21 that's why I wanted to see what came before, because 11:25:00
22 it's trying to get at as far as personality. "It 11:25:04
23 makes it difficult for those things to even come 11:25:06
24 into play because the central issue is the drug. In 11:25:10
25 this case, the drug is nicotine." 11:25:12

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1 Q. Would you hand that back to me, please. 11:25:16
2 A. (Indicating.)
3 Q. As you used "rational thought" in that statement 11:25:22
4 yesterday, did you mean that nicotine interferes 11:25:26
5 with cognition? 11:25:30
6 MS. WALBURN: Objection, form, and I am 11:25:30
7 going to object to this entire line of inquiry as in 11:25:34
8 violation of the case management order and Counsel's 11:25:36
9 representations yesterday. 11:25:40
10 BY MR. McDONNELL:
11 Q. You can answer, Doctor. 11:25:42
12 A. As I said in that statement, when we talk about drug 11:25:46
13 dependence, and nicotine dependence is what we are 11:25:48
14 talking about, when a person has a drug involved -- 11:25:54
15 the context of this came because they were asking -- 11:25:56
16 the person was asking questions about personality 11:25:58
17 disorders, I think is what came before that. 11:26:00
18 Q. Correct. 11:26:00
19 A. So as personality disorders, are they the driving 11:26:04
20 force behind this? And I think it actually all 11:26:06
21 comes back from the '64 Surgeon General's Report 11:26:10
22 where there was a section talking about psychiatric 11:26:12
23 disorders being the prelude to addiction. 11:26:16
24 What I was trying, and what I think I did 11:26:16
25 say in that, was that when a drug is involved, then 11:26:20

1 it interferes with the thought processes because 11:26:24
2 when a person continues to use that drug, despite 11:26:30

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3 having a medical or other consequences to the drug, 11:26:30
4 that's a process we call rationalization and 11:26:34
5 denial. 11:26:34
6 Those are the addictions terms that we 11:26:36
7 use. So that's -- that's what I think I said and 11:26:40
8 that's what I meant. 11:26:40
9 Q. I understand. I am just trying to -- but your 11:26:46
10 belief or your opinion for this case is that 11:26:48
11 nicotine interferes with the thought processes of a 11:26:52
12 person who smokes cigarettes? 11:26:54
13 MS. WALBURN: Objection, asked and 11:26:56
14 answered on multiple occasions, including 11:26:58
15 yesterday. 11:26:58
16 BY MR. McDONNELL:
17 Q. Is that right, Doctor? 11:27:00
18 A. What I said was that nicotine, as a drug of 11:27:04
19 dependence, just like all other drugs of dependence, 11:27:08
20 interfere with the ability of the individual to 11:27:12
21 recognize that they're continuing to use a 11:27:16
22 substance, in this case nicotine, despite strong 11:27:18
23 medical reasons or social or other reasons not to 11:27:22
24 use, and that is a thing we call rationalization and 11:27:24
25 denial. That's what I said. That's my opinion. 11:27:28

1 Q. I understand. Is that, in your view, an invariable 11:27:32
2 result of cigarette smoking or is it only -- is it 11:27:38
3 only certain people that experience that effect? 11:27:40
4 MS. WALBURN: Objection, form. 11:27:42
5 THE WITNESS: That's a variable in what 11:27:44

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6 way? Rationalization -- 11:27:46

7 BY MR. McDONNELL:

8 Q. Does everyone who smokes cigarettes have the effect 11:27:52

9 that you just described? 11:27:54

10 A. People who are not dependent on the drug nicotine 11:28:00

11 would not be exercising rationalization and denial. 11:28:04

12 Q. And some people who smoke cigarettes are not 11:28:08

13 dependent on the drug nicotine? 11:28:10

14 A. Some people are that way. There -- in our parlance 11:28:14

15 we call them chippers. They can smoke a few 11:28:18

16 cigarettes and for some reason don't reach the 11:28:20

17 threshold to cross over into dependence. 11:28:22

18 And some children smoke some cigarettes 11:28:26

19 and not long enough to become dependent. They don't 11:28:28

20 reach that threshold of nicotine absorption, 11:28:34

21 nicotine dose that I think your company probably 11:28:36

22 very eloquently described in the papers reviewed 11:28:40

23 yesterday as a threshold for above this they become 11:28:42

24 dependent. 11:28:42

25 So there are people that do not exercise 11:28:46

1 rationalization and denial, just like people who 11:28:48

2 drink alcohol that are not alcoholics do not have 11:28:52

3 rationalization and denial, nor loss of control, for 11:28:56

4 that matter. 11:28:58

5 Q. Or interference with their thought processes? 11:29:00

6 MS. WALBURN: Objection, form. 11:29:02

7 THE WITNESS: You have to explain what you 11:29:04

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8 mean by "interference with thought processes" 11:29:06
9 because I don't understand what you are talking 11:29:08
10 about. 11:29:08
11 BY MR. McDONNELL:
12 Q. It was your phrase, Doctor, just in the last 45 11:29:12
13 seconds. 11:29:12
14 MS. WALBURN: Objection, misstates the 11:29:16
15 record. 11:29:16
16 THE WITNESS: I don't think I said that in 11:29:16
17 the last 45 seconds. 11:29:18
18 BY MR. McDONNELL:
19 Q. Okay. Well, the record will show whether you did, 11:29:20
20 or not. 11:29:20
21 A. In fact, I am pretty certain I didn't say it. 11:29:24
22 Q. Well, that's a measure of your certainty. 11:29:28
23 A. Memory, maybe. 11:29:28
24 Q. Right. You believe that nicotine is an addictive 11:29:34
25 drug; is that true? 11:29:36

1 MS. WALBURN: Objection, asked and 11:29:38
2 answered. And again, Counsel, I am going to caution 11:29:40
3 you that we are not going to repeat yesterday's 11:29:42
4 deposition here. 11:29:44
5 THE WITNESS: Yes, nicotine is an 11:29:46
6 addicting drug and it's really most addicting in the 11:29:52
7 most efficient delivery form; the one we are talking 11:29:56
8 about is cigarettes. It is the most efficient 11:29:58
9 delivery form of nicotine that exists. 11:30:00
10 BY MR. McDONNELL:

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11 Q. To say something is a drug is not the same thing as 11:30:02
12 saying it's addictive, is it? There are drugs that 11:30:06
13 are not addictive? 11:30:06
14 A. That's correct, there are drugs that aren't 11:30:08
15 addictive. 11:30:10
16 Q. To say that a compound or substance has central 11:30:14
17 nervous system effects is not the same thing as 11:30:18
18 saying that it's addictive; is it? 11:30:20
19 A. That's correct. 11:30:20
20 Q. To say that a substance produces psychoactive 11:30:22
21 effects is not the same thing as saying it's an 11:30:26
22 addictive substance, lots of substances produce 11:30:28
23 psychoactive effects and are not addictive; do you 11:30:32
24 agree with that? 11:30:32
25 A. There are drugs that do that. 11:30:34

1 Q. To say that a substance or a compound is rewarding 11:30:40
2 or reinforcing, that's not an identical statement to 11:30:44
3 say that -- as saying that the compound is 11:30:46
4 addictive, is it? 11:30:48
5 A. In the sense that we use the term "reward," we are 11:30:56
6 talking about this, we are talking about the reward 11:31:00
7 and pleasure system of addictive drugs. 11:31:02
8 And that's -- that's the context in which 11:31:04
9 we are talking about pleasure and reward, which is 11:31:08
10 most applied to this set of drugs and the drugs that 11:31:16
11 are -- that do produce addiction. 11:31:18
12 So I am -- in the confines of what we are 11:31:22

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13 talking about, that's -- pleasure and reward is 11:31:24
14 something that addictionologists talk about a lot. 11:31:28
15 Q. I understand, but it's not a one-to-one equation, is 11:31:30
16 it? Every time a scientist says that this substance 11:31:34
17 is reinforcing, he is -- he doesn't mean that this 11:31:38
18 is an addictive substance, does he? 11:31:42
19 A. Well, you have used another term now, so you want to 11:31:46
20 talk about pleasure and reward or do you want to 11:31:46
21 talk about reinforcement. 11:31:48
22 Q. I didn't mention pleasure and reward, Doctor. I 11:31:50
23 said reinforcing and rewarding, so I didn't say 11:31:54
24 pleasure. Pleasure is your word. 11:31:56
25 A. Okay. Reinforcement also is a word that we use 11:32:00

1 fairly frequently when it comes to addictive 11:32:02
2 behavior and addictive drugs because that's the way 11:32:04
3 that they -- that's the way they work in the central 11:32:08
4 nervous system. They produce a cascade which 11:32:10
5 produces pleasure and reward, which is the 11:32:12
6 reinforcement that goes into the person continuing 11:32:16
7 to use that drug despite having all these adverse 11:32:18
8 consequences. That's -- reinforcement is part of 11:32:22
9 this process. 11:32:22
10 Q. Do things other than addictive drugs produce 11:32:26
11 reinforcement? 11:32:30
12 MS. WALBURN: Objection, form. 11:32:32
13 THE WITNESS: Other things? 11:32:32
14 BY MR. McDONNELL:
15 Q. Other substances. 11:32:36

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16 A. Like what? 11:32:38

17 Q. Food. 11:32:38

18 A. Food? 11:32:42

19 Q. Food reinforcing? 11:32:42

20 A. In the sense we are talking about here as an 11:32:48

21 addictive substance, food does not do that at all. 11:32:54

22 Q. My question is, when someone says this is a 11:32:56

23 reinforcing substance, are they saying this is an 11:32:58

24 addictive substance or are they just saying it's 11:33:00

25 something that provides sufficient reward that 11:33:04

1 people will perform a task to acquire it? 11:33:08

2 MS. WALBURN: Well, objection, form and 11:33:12

3 asked and answered. 11:33:12

4 THE WITNESS: There is a lot of parts to 11:33:14

5 your question. If you can give me one part you want 11:33:16

6 me to answer, I will try to do that. It has to do 11:33:18

7 with food, I think, and it has to do with 11:33:20

8 reinforcement. 11:33:22

9 BY MR. McDONNELL:

10 Q. I will make it easy. Is food reinforcing? 11:33:24

11 A. Food is a necessary substance for human life to 11:33:26

12 continue to exist, and in that sense if a person 11:33:30

13 doesn't eat, they get hungry, they eat or else they 11:33:34

14 starve to death. 11:33:36

15 I mean, that's -- I mean, what more -- it 11:33:38

16 seems elementary that that would be the case with 11:33:42

17 food. If you don't eat, something really bad 11:33:46

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18 happens, and it happens fairly quickly. You know, 11:33:48
19 people fight wars because of starvation. Is that 11:33:52
20 reinforcement? Yeah, that's -- on a grand scale. 11:33:54
21 So it has to do with the term, and I am 11:33:58
22 not sure that reinforcement is the right term. Food 11:34:02
23 is necessary for survival, as opposed to nicotine 11:34:04
24 and cigarettes, which are not. 11:34:06
25 Q. Do you know whether most addiction experts would 11:34:12

1 answer the question, "Is food reinforcing?" yes or 11:34:16
2 no? 11:34:16
3 MS. WALBURN: Objection, form. 11:34:18
4 THE WITNESS: "Most" meaning half or all 11:34:24
5 or -- 11:34:24
6 BY MR. McDONNELL:
7 Q. More than half. 11:34:26
8 A. I have never polled them to ask the question. 11:34:28
9 Q. You don't have a sense of it? 11:34:30
10 A. I really don't. 11:34:32
11 Q. Don't know the answer? 11:34:34
12 MS. WALBURN: Objection, asked and 11:34:36
13 answered. 11:34:36
14 THE WITNESS: I have never polled any 11:34:38
15 addiction experts to ask them about food as a 11:34:42
16 reinforcing substance, and the way I would say it 11:34:46
17 again is that food is necessary for the continuation 11:34:48
18 of life, and therefore, it's really different than 11:34:52
19 drugs of addiction which produce pleasure, reward, 11:34:56
20 which feeds into reinforcement in a way that's on a 11:35:00

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21 totally different plane than food does. 11:35:02

22 BY MR. McDONNELL:

23 Q. I understand. I understand the difference you are 11:35:04

24 drawing between food and nicotine. But I think you 11:35:08

25 are telling me -- and tell me if I am wrong. 11:35:12

1 I think you are telling me that food may 11:35:14

2 be reinforcing, but food is quite different from 11:35:18

3 nicotine. 11:35:18

4 MS. WALBURN: Objection, form. 11:35:22

5 BY MR. McDONNELL:

6 Q. Can I get you to agree with that? 11:35:24

7 A. What I said was that food is necessary for life to 11:35:26

8 exist. 11:35:26

9 Q. And nicotine is not? 11:35:28

10 MS. WALBURN: Excuse me, Counsel. I don't 11:35:30

11 believe that the witness was finished. 11:35:32

12 BY MR. McDONNELL:

13 Q. I am sorry. Go ahead. 11:35:34

14 A. Food is necessary for continuation of life. If you 11:35:36

15 don't have food, you die. And so in that respect, 11:35:40

16 if that means reinforcement to someone, I couldn't 11:35:42

17 object strenuously to that, but it's a pretty far 11:35:48

18 stretch from the context of drugs of addiction, 11:35:50

19 which produce pleasure, reward, which feeds into 11:35:54

20 reinforcement for continuation of the use of a 11:35:58

21 substance that might cause their demise. 11:36:00

22 Q. In your opinion, Doctor, is caffeine reinforcing? 11:36:06

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23 A. Caffeine has some reinforcement characteristics, 11:36:10
24 yeah. 11:36:10
25 Q. Do you know whether under some laboratory 11:36:14

1 conditions, laboratory animals will self-adminster 11:36:18
2 caffeine? 11:36:20
3 A. I guess I have to go back and look. That's 11:36:26
4 feasible, but I guess, to answer your question, I do 11:36:30
5 not know of a specific study that would show that, 11:36:34
6 but I am sure you have one. 11:36:34
7 Q. Do you -- in your view, if a substance is 11:36:40
8 self-administered by laboratory animals, is it 11:36:46
9 addictive? 11:36:46
10 A. Self-administered -- self-administration by 11:36:50
11 laboratory animals is a -- one of the ways we 11:36:54
12 characterize substances that can produce addiction. 11:36:58
13 The trouble with some of them is that they 11:37:00
14 are so noxious that you can't get rats to use them 11:37:04
15 because the side effects are so bad, and nicotine is 11:37:08
16 one of those. It took a long time before anybody 11:37:10
17 could show that rats would self-adminster nicotine, 11:37:14
18 and that's been shown. 11:37:16
19 Caffeine and other -- and alcohol and 11:37:18
20 other substances were easier to do because they 11:37:20
21 weren't as bad tasting as nicotine is and so on. 11:37:26
22 Q. Is it your view that self-administration without 11:37:32
23 more is sufficient to show that a substance is 11:37:34
24 addictive? 11:37:34
25 A. I don't understand, without more -- 11:37:36

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1 Q. Without anything else, all you know about the 11:37:38
2 substance is that under some laboratory conditions 11:37:42
3 laboratory animals will self-adminster it? 11:37:44
4 A. No. I mean, what I said was is what I believe and 11:37:50
5 that is self-administration by laboratory animals is 11:37:52
6 one of the factors that people use when they do 11:37:54
7 this. 11:37:54
8 But when we talk about people and patients 11:37:58
9 and -- in the context of the real world that I live 11:38:04
10 in, what I have said in my report is what is true, 11:38:08
11 and we use the DSM-IV criteria to define, and 11:38:12
12 nowhere in there, I think, is there mention of rats 11:38:16
13 pushing a lever to see if they will self-adminster a 11:38:18
14 drug. 11:38:20
15 I don't think that's written in the DSM-IV 11:38:22
16 criteria, but it -- that's also a big book and -- 11:38:24
17 but it's not certainly written in the pages that I 11:38:28
18 have looked at. 11:38:28
19 Q. I want to talk to you for a moment about the 11:38:32
20 documents that you have been testifying about for 11:38:36
21 the last day or so. I understood you to say to 11:38:44
22 Mr. Gale that you requested the documents that you 11:38:48
23 received; is that right? 11:38:48
24 MS. WALBURN: Objection, asked and 11:38:50
25 answered, and again violates the case management 11:38:52

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1 orders and the representations of counsel to not tag 11:38:54
2 team and cover duplicative ground in these 11:38:58
3 depositions. 11:38:58
4 BY MR. McDONNELL:
5 Q. Doctor? 11:39:00
6 A. Who is Mr. Gale? 11:39:00
7 Q. I am sorry, he is the gentleman who asked you 11:39:02
8 questions earlier this morning. 11:39:04
9 A. Okay. Just trying to keep it straight. 11:39:06
10 Q. That's all right. Good for you. 11:39:10
11 A. When I started this process, we -- and I use the 11:39:14
12 word "we" a lot. I knew that there was documents 11:39:18
13 and I was told that there was documents, and I asked 11:39:20
14 to see documents based on what I felt my area of 11:39:24
15 expertise is, and that's listed in my expert 11:39:30
16 report. I can read those off to you, but that was 11:39:32
17 the request that I made to show me stuff that has 11:39:34
18 relevance to these areas. 11:39:36
19 Q. To whom did you say that? 11:39:38
20 A. Probably either Gary or Roberta but I couldn't tell 11:39:46
21 you which, or maybe both. It's -- 11:39:48
22 Q. And do you recall whether you said it in writing or 11:39:50
23 orally? 11:39:52
24 A. I think it was orally. I don't think I wrote it 11:39:54
25 down. 11:39:54

1 Q. And were there documents provided to you pursuant to 11:39:58

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2 that request? 11:40:00
3 A. Correct. 11:40:00
4 Q. And we have received from the Robins, Kaplan law 11:40:08
5 firm a list of documents which you have reviewed 11:40:12
6 with codes that tell us what company they come from, 11:40:16
7 and so forth. 11:40:18
8 Have you seen that document? I can show 11:40:24
9 it to you. 11:40:24
10 A. I think we saw that yesterday when you couldn't 11:40:26
11 figure out if ya'll had gotten one, I think I saw 11:40:28
12 that, the listing of the Bate numbers and the -- I 11:40:34
13 think I have seen that, but I haven't reviewed it. 11:40:36
14 Q. You didn't make it up? 11:40:38
15 A. Make that list up? 11:40:38
16 Q. Right. 11:40:40
17 A. No. 11:40:40
18 Q. Do you know who made it up? 11:40:44
19 A. I assume someone that's a secretarial type person 11:40:48
20 probably did. 11:40:48
21 Q. Well, do you know who selected the documents for 11:40:52
22 listing on that list? 11:40:56
23 MS. WALBURN: Objection, form. 11:40:58
24 THE WITNESS: I mean, maybe -- which list 11:41:02
25 are you talking about? Are we talking about the 11:41:06

1 same list? Do I have it? 11:41:12
2 BY MR. McDONNELL:
3 Q. See if we can figure that out. 11:41:14

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4 A. I don't have it here. This. This is what you are 11:41:18
5 talking about? 11:41:20
6 Q. Yes, exactly. 11:41:22
7 A. That's Exhibit 2454. 11:41:24
8 Q. Yes. I am sorry. 11:41:26
9 A. This is just a listing of documents of the 11:41:28
10 defendant, start number, end number, and it's 11 11:41:32
11 pages long. 11:41:34
12 Q. And it purports to be a list of documents which you 11:41:36
13 have reviewed; is that correct? 11:41:38
14 A. It says "Dr. Richard Hurt discovery documents." 11:41:40
15 Q. All right. Do you know whether it is a list of 11:41:44
16 documents that you have reviewed? 11:41:46
17 A. I haven't gone back to check off the list against 11:41:48
18 the documents that I reviewed, no. 11:41:50
19 Q. Did you ever provide to Ms. Walburn or any of the 11:41:56
20 lawyers at Robins, Kaplan a list of documents that 11:42:00
21 you had reviewed? 11:42:02
22 A. I have done abstracts of the documents that I have 11:42:06
23 reviewed and I have forwarded copies of those 11:42:08
24 abstracts when I have completed them to Roberta or 11:42:14
25 Gary. And I understand that -- well, I think I 11:42:18

1 know, since we saw one earlier today, that you all 11:42:22
2 have received those as well. 11:42:22
3 Q. Yes. 11:42:24
4 A. And those abstracts are just what they are. I 11:42:26
5 reviewed the documents, I dictated an abstract about 11:42:28
6 that document and then went on to something else, 11:42:30

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7 and so it wasn't on an in-depth review of each 11:42:34
8 document, it was kind of my first initial review. 11:42:36
9 I looked at it, these are the things that 11:42:38
10 are -- look like they might be important as a way of 11:42:40
11 kind of cataloging them so that I could go back to 11:42:44
12 them if I needed to. 11:42:44
13 Q. But have you ever, either orally or in writing, 11:42:48
14 provided to Ms. Walburn or anybody at Robins, Kaplan 11:42:50
15 a list of all the documents, not these little 11:42:52
16 abstracts, but all the documents that you have 11:42:54
17 looked at? 11:42:56
18 MS. WALBURN: Objection, form. 11:42:58
19 THE WITNESS: It's a process, it's a 11:43:04
20 process in work. 11:43:06
21 BY MR. McDONNELL:
22 Q. Process? 11:43:08
23 A. I mean, it's not completed. I have reviewed but I 11:43:16
24 haven't dictated notes on all of the abstracts. I 11:43:16
25 have reviewed them all, but that's a lot of -- lot 11:43:20

1 of things. 11:43:20
2 Q. Sure. 11:43:22
3 A. And so I have reviewed them, but whether or not I 11:43:24
4 have dictated something about them -- and I don't -- 11:43:24
5 I haven't kept a list to cross-check and see. 11:43:26
6 Q. Do you know as you sit here whether the list that 11:43:32
7 you are holding in your hand, which is Exhibit 2454, 11:43:38
8 contains documents other than the documents on which 11:43:42

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9 you have dictated comments? 11:43:46

10 MS. WALBURN: Objection. Calls for 11:43:52

11 speculation. 11:43:52

12 THE WITNESS: I mean -- 11:43:54

13 MR. McDONNELL: Either he knows or he 11:43:56

14 doesn't know. 11:43:56

15 THE WITNESS: Without comparing them I 11:43:58

16 couldn't tell you. I mean, that's a -- I would have 11:44:00

17 to go back and make a comparison. 11:44:00

18 BY MR. McDONNELL:

19 Q. Sure. It's not -- that's a perfectly appropriate 11:44:04

20 answer, Doctor. 11:44:04

21 Who put together the notebook to which you 11:44:08

22 have been referring? 11:44:08

23 A. The notebook really has been a -- kind of a work in 11:44:14

24 process, as well. We worked on -- we, and I use 11:44:20

25 that term collectively, we have worked on how that 11:44:22

1 might be organized, and so I decided I would prefer 11:44:28

2 to have it organized in the way that the expert 11:44:30

3 report is written so that I could refer to the 11:44:32

4 documents if I needed to, and then I asked that that 11:44:36

5 be done, and someone did that. I don't know if it 11:44:40

6 was Gary or Ms. Walburn or a secretary or what. 11:44:44

7 But that's -- the order of it was 11:44:46

8 something I wanted to do so that I could at least 11:44:48

9 make this manageable. 11:44:50

10 Q. I understand -- I understand what your testimony 11:44:52

11 about the order of it is. Who decided what 11:44:54

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12 documents would be placed in the notebook? 11:44:56

13 MS. WALBURN: Objection, asked and 11:44:58

14 answered. 11:44:58

15 THE WITNESS: The documents are the ones 11:45:00

16 that had been most cited in my expert report so I 11:45:06

17 would have them here, and then there were several 11:45:10

18 others that were particularly interesting to me that 11:45:12

19 seemed like they had relevance to those topics that 11:45:16

20 may or may not have been cited in my expert report 11:45:18

21 because this is, again, a work in process, or work 11:45:22

22 in progress. 11:45:24

23 So there were things, maybe I have 11:45:26

24 continued to review, and I will continue to review 11:45:28

25 more documents as they become available. 11:45:32

1 BY MR. McDONNELL:

2 Q. You have never been to what's termed in this 11:45:38

3 litigation the Minnesota Depository to review 11:45:42

4 documents, have you? 11:45:42

5 A. No. 11:45:42

6 Q. Have you, on any occasion after your initial 11:45:50

7 conversation with whoever it was at Robins, Kaplan, 11:45:52

8 asked for additional documents relating to some 11:45:56

9 subject or topic? 11:45:56

10 A. My initial reaction to that was this is enough 11:46:06

11 already so -- 11:46:06

12 Q. That's a -- 11:46:08

13 A. But I -- I may have, but I couldn't tell you what 11:46:10

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14 because there were some things that would be 11:46:12
15 referred to in some documents, like I think there 11:46:18
16 was one that referred to a letter by a person about 11:46:22
17 a report from before, and so there may have been 11:46:24
18 some of that, but I couldn't tell you which ones. 11:46:28
19 Q. Do you recall when -- if -- you don't recall, I 11:46:34
20 guess, whether or not you did ask for documents. Do 11:46:38
21 you recall whether, in response to any conversation 11:46:40
22 like that, you did receive an additional set of 11:46:42
23 documents? 11:46:42
24 A. If I -- you know, I -- like I just said, if I did 11:46:50
25 that, I couldn't give you -- cite you chapter and 11:46:54

1 verse of which document it was, and so if I can't -- 11:47:08
2 so logically I couldn't cite you chapter and verse 11:47:10
3 of whether or not I received it. 11:47:12
4 Q. Fair enough. There is a list of articles at the end 11:47:18
5 of your report on which you rely. Who compiled that 11:47:24
6 list? 11:47:24
7 A. I did. 11:47:26
8 Q. And have you -- is it your testimony that you have 11:47:30
9 read all the articles that are on that list? 11:47:32
10 A. I have reviewed those articles. Whether or not I 11:47:38
11 have read all of the articles and retained 11:47:40
12 everything about every article, that's not 11:47:42
13 possible. So I have reviewed them. 11:47:46
14 Q. I just want to be clear. I am not asking you if you 11:47:50
15 retained it. I am just asking you, have you read 11:47:52
16 all those articles? 11:47:54

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17 MS. WALBURN: Objection, asked and 11:47:56
18 answered. 11:47:56
19 THE WITNESS: What I just said is what I 11:47:58
20 have did. I have reviewed all those articles. 11:48:00
21 Whether or not I have reviewed every word of every 11:48:02
22 article, I have reviewed all the articles that are 11:48:06
23 on this list. 11:48:08
24 BY MR. McDONNELL:
25 Q. Have you read the book Ashes to Ashes? 11:48:10

1 A. I have read parts of it. I haven't read all of it. 11:48:14
2 Q. Do you rely on any parts of it for your testimony in 11:48:16
3 this case? 11:48:16
4 A. It's not listed as one of my books, one of the 11:48:20
5 sources, I don't think. I don't think I have used 11:48:22
6 that in any way. 11:48:24
7 Q. So the best of your knowledge, you don't rely on any 11:48:28
8 of the statements in the book Ashes to Ashes as a 11:48:30
9 basis for your testimony? 11:48:32
10 A. If I have read ten pages of the Ashes to Ashes, 11:48:36
11 that's probably more than I would -- I haven't read 11:48:40
12 very much of Ashes to Ashes, if any of it. I mean, 11:48:44
13 I have seen the book, but I -- it's an interesting 11:48:46
14 story, I have to say, from what I have heard. 11:48:50
15 Q. But you haven't read it so you don't have to go on 11:48:52
16 about it. 11:48:52
17 Can you turn to page 24 of the -- I guess 11:49:00
18 it's 24 of your report, which is -- 11:49:02

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19 A. Okay. 11:49:04

20 Q. -- a page of the listing of works on which you have 11:49:12

21 relied. Are you there? 11:49:14

22 A. Uh-huh. 11:49:14

23 Q. Do you see the last thing on that page, "Fant, 11:49:18

24 Pickworth, Henningfield: `The Addictive Effects of 11:49:20

25 Nicotine Are Related To the Speed of Delivery,' 11:49:32

1 Unpublished paper (1997)"? 11:49:34

2 A. Yeah. 11:49:36

3 Q. Did you read that article? 11:49:36

4 A. I think I -- I reviewed it. Whether or not I read 11:49:38

5 it, I reviewed it, yep. 11:49:38

6 Q. Turn over to page 30 for a minute. Go up six from 11:49:46

7 the bottom there. Do you see the piece Vant RV, 11:49:54

8 Pickworth, "The addictive effects of nicotine are 11:49:56

9 related to the speed of delivery," submitted for 11:49:58

10 publication 1997? 11:50:00

11 A. Uh-huh. 11:50:00

12 Q. Same article? 11:50:00

13 A. I would have to look at them because I left off 11:50:06

14 Henningfield, if it's the same. I would have to 11:50:14

15 look at -- I would have to look at my files. 11:50:16

16 Q. They have the same title. 11:50:18

17 A. They have the same title but one citation has three 11:50:20

18 authors and one has two. I didn't pick that up when 11:50:24

19 I reviewed this. Otherwise I would have checked 11:50:26

20 myself. 11:50:26

21 Q. Do you know whether the right name is Fant or Vant? 11:50:30

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22 A. I do not. 11:50:32

23 Q. Do you know how you obtained this published document 11:50:40

24 or this unpublished article? 11:50:44

25 A. Probably either from Wally Pickworth or Jack 11:50:46

1 Henningfield. 11:50:46

2 Q. Do you recall? 11:50:48

3 A. I mean, I -- those of us in this field meet, talk, 11:50:56

4 had conferences, a slide is put up on the screen, 11:51:02

5 new data. You go up to them afterwards, you put on 11:51:06

6 the back of your business card, I would like a copy 11:51:08

7 of that slide or I would like a copy of the paper 11:51:10

8 that has to do with that, and then we send things to 11:51:14

9 each other. 11:51:14

10 That's the way -- that's the way the peer 11:51:18

11 review science world is. We share information and 11:51:22

12 collaborate and we don't mark things confidential or 11:51:26

13 secret. We collaborate. 11:51:30

14 So I don't know which one I did that 11:51:32

15 with. It could have been either one. I don't know 11:51:34

16 who Fant or Vant, whichever that is is, but I do 11:51:36

17 know Wally Pickworth and Jack Henningfield. It 11:51:38

18 could be either one of them. 11:51:40

19 Q. Where is Wally Pickworth? 11:51:42

20 A. He was at NIDA, but I don't know if he is still 11:51:44

21 there. NIDA is the National Institute of Drug 11:51:50

22 Abuse. 11:51:52

23 Q. I think it's the National Institute on Drug Abuse. 11:51:54

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24 Dr. Henningfield makes a point of -- 11:51:56

25 A. Could be. 11:51:58

1 Q. -- that he is on drugs, not of drugs. 11:52:00

2 But -- Dr. Hurt, you said yesterday that 11:52:08

3 the industry knew a lot about pH and nicotine 11:52:12

4 manipulation that no one else knew. 11:52:16

5 Do you recall saying that? 11:52:16

6 A. If I did, I am sure it's in the record. And 11:52:22

7 that's -- 11:52:22

8 Q. It's your belief? 11:52:24

9 A. According to what I have reviewed in the documents, 11:52:28

10 the industry has known all along about pH and pH 11:52:32

11 manipulation as it relates to delivery of nicotine 11:52:36

12 and has known about it for a long time. 11:52:38

13 Q. Prior to your report did you do any specific 11:52:44

14 literature review relating to pH in nicotine? 11:52:48

15 A. Did I do any specific literature review? 11:52:52

16 MS. WALBURN: Objection, form. 11:52:54

17 THE WITNESS: As in the scientific 11:53:02

18 literature? 11:53:04

19 BY MR. McDONNELL:

20 Q. Yes. 11:53:04

21 A. Because that's really all that I reviewed. I mean, 11:53:08

22 there is one report in here from Tobacco Science 11:53:08

23 that's not on my literature review list that had to 11:53:12

24 do with pH in nicotine, and so the scientific review 11:53:16

25 or scientific search to me would be MedLine, 11:53:20

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something like that. 11:53:22

Q. Did you do a MedLine search? 11:53:24

A. I don't recall doing a MedLine search on pH and 11:53:26
nicotine. 11:53:28

Q. Did you do a MedLine search on pH? 11:53:32

A. I don't think so. 11:53:36

Q. Can you recall using any computer-assisted retrieval 11:53:42
program to retrieve articles on pH? 11:53:48

A. No. 11:53:52

Q. Did you ask anyone on your staff to collect articles 11:53:58
on pH or pH in nicotine? 11:54:00

A. No. 11:54:02

Q. Did you try to identify people at Mayo who were 11:54:08
perhaps more knowledgeable than you about pH 11:54:14
issues? 11:54:16

MS. WALBURN: Objection, form. 11:54:18

THE WITNESS: There obviously are people 11:54:22
more knowledgeable than I am about nicotine -- about 11:54:26
pH, but no, I didn't contact anyone about pH. 11:54:30

BY MR. McDONNELL:

Q. Who are some of the people that you regard as more 11:54:32
knowledgeable than yourself about pH who are on 11:54:36
staff at Mayo? 11:54:36

A. Oh, a biochemist would be. 11:54:38

Q. Give me one or two names. 11:54:42

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1 A. Tom Moyer (ph) would be -- he is a biochemist. Yes, 11:54:50
2 that's what they do. 11:54:50
3 Q. And you regard him as an accomplished person in his 11:54:56
4 field? 11:54:56
5 A. Uh-huh. 11:54:58
6 Q. Did you go back and review the Surgeon General's 11:55:10
7 Reports for the statements that the Surgeon General 11:55:12
8 had made in different reports about pH and 11:55:16
9 nicotine? 11:55:16
10 MS. WALBURN: Objection, form. 11:55:20
11 THE WITNESS: You are talking about all 11:55:22
12 the Surgeon General's Reports? 11:55:24
13 BY MR. McDONNELL:
14 Q. All of them. 11:55:24
15 A. The Surgeon General's Reports that I reviewed had to 11:55:26
16 do with the ones that are cited in my expert 11:55:30
17 report. I don't know -- I can't remember if that's 11:55:32
18 all of them or not. It's probably pretty close. 11:55:34
19 Whether or not I went back and reviewed each one of 11:55:36
20 them individually with regard to pH, they are big 11:55:42
21 reports. 11:55:42
22 Q. They are. 11:55:44
23 A. I don't think I did that specifically, but it -- but 11:55:50
24 I could have. But it wasn't some methodology. 11:55:54
25 Q. As you sit here today and are giving a deposition, 11:56:04

1 can you identify for me a fact that you believe that 11:56:14
2 the tobacco companies knew about pH and nicotine 11:56:18

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3 that was not known in the public scientific 11:56:18
4 community? 11:56:20
5 MS. WALBURN: Objection, form and asked 11:56:22
6 and answered, and I am again going to caution 11:56:24
7 counsel that you are violating the rules of this 11:56:26
8 litigation by re-covering ground that was covered 11:56:30
9 yesterday. 11:56:30
10 MR. McDONNELL: I don't think this 11:56:32
11 question was put because I was attentive to it 11:56:34
12 yesterday but I may be wrong. 11:56:36
13 BY MR. McDONNELL:
14 Q. You can answer the question. 11:56:36
15 MS. WALBURN: Well, this topic was covered 11:56:40
16 in great detail yesterday afternoon and you are 11:56:42
17 violating court orders as you proceed, and there are 11:56:44
18 going to be limits to this, Counsel. 11:56:48
19 BY MR. McDONNELL:
20 Q. Doctor, you can respond. 11:56:48
21 A. So what's the question? 11:56:50
22 Q. Can you, as you sit here today, and this is my 11:56:52
23 opportunity to talk to you, can you give me a 11:56:58
24 specific of -- that -- a specific example of the 11:57:00
25 statement you made yesterday that the companies knew 11:57:04

1 a lot about pH and nicotine that was not known in 11:57:10
2 the public sign -- that no one else knew? That's my 11:57:12
3 question. Just give me one, or if you can, two 11:57:16
4 examples. 11:57:18

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5 A. Well, I mean, I don't know if that's what I said or 11:57:20
6 not. You are saying that's what I said. 11:57:22
7 Q. I am saying that's what you said. 11:57:24
8 A. So without knowing exactly what I said -- 11:57:30
9 Q. Well, let's just take it as my question, whether you 11:57:32
10 said it or not. 11:57:34
11 A. That's fine. That's fine. That's fine. When you 11:57:36
12 have this much volume to deal with as far as trying 11:57:44
13 to pick out one or two things that may or may not 11:57:48
14 have been known to the tobacco industry or to the 11:57:50
15 public and try to do a comparative analysis, it 11:57:54
16 would take a long time to do that, and -- but the 11:57:56
17 theme here is the important part. 11:58:00
18 The themes are several. One, nicotine is 11:58:02
19 a drug of dependence, drug of addiction. pH can be 11:58:08
20 used, at least by one company, the one that you 11:58:10
21 represent, and was used way back in the '60s, to do 11:58:18
22 something to the delivery of nicotine. 11:58:18
23 Q. Could I stop you there for a second? 11:58:22
24 A. And so that has gone on. And the wealth of the -- 11:58:24
25 the depth of the information is the thing that's 11:58:26

1 most impressive, and I have not gone back to do one, 11:58:30
2 two or three things that weren't known to the public 11:58:32
3 knowledge. 11:58:32
4 Q. I understand. Okay. You said that -- you said, 11:58:36
5 you, the company you represent, used pH to do 11:58:40
6 something in the mid '60s. 11:58:42
7 A. What I would say is that the -- your competitors 11:58:46

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8 said that. They said that they are doing something 11:58:50
9 to Marlboro that has to do with pH, delivery of 11:58:54
10 nicotine, that's affecting sales, or dollars, 11:59:00
11 profits, and we need to figure out what it is 11:59:02
12 because we don't -- we are not doing as well as they 11:59:06
13 are, and so they began to try to figure that out in 11:59:10
14 their research. 11:59:10
15 So that's -- a lot of these documents have 11:59:12
16 to do with R.J. Reynolds trying to catch up with 11:59:16
17 Philip Morris. I have got that right. You do 11:59:20
18 represent Philip Morris? 11:59:20
19 Q. You have that right, Doctor. 11:59:22
20 A. So the other companies trying to catch up with 11:59:26
21 Marlboro. And something had happened to Marlboro 11:59:30
22 that was very different, and the conclusion that the 11:59:32
23 other companies made was that it was pH 11:59:36
24 manipulation, which made the nicotine delivery 11:59:40
25 faster, and that's what they concluded. 11:59:46

1 And I never saw that in the newspapers, 11:59:50
2 for example. I never saw that in any scientific 11:59:54
3 report, that one company was worried about what the 11:59:56
4 other one was doing because they were doing 11:59:58
5 something to -- it reached the New York Times later 12:00:02
6 on -- it reached the New York Times like within the 12:00:06
7 last couple of years where there was something about 12:00:06
8 ammonia used to boost nicotine delivery, I think I 12:00:10
9 can recall the headlines of that, which had to do 12:00:14

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10 with the revelation of one of the internal 12:00:16
11 documents, so that's -- as best I can tell from 12:00:20
12 reviewing all of these, the pH manipulation goes 12:00:24
13 back at least to the early to mid '60s as it's 12:00:28
14 referenced to Philip Morris. 12:00:28
15 Q. Now, do you have any basis for saying that about 12:00:32
16 Philip Morris other than the statements that you've 12:00:34
17 referred to in its competitors' documents? 12:00:36
18 A. I think there are some in here that are from 12:00:40
19 Philip Morris that speak to the issue of pH 12:00:42
20 manipulation. 12:00:42
21 Q. In the mid '60s? 12:00:46
22 A. I couldn't tell you. These are a lot of documents 12:00:48
23 and I couldn't tell you. 12:00:48
24 Q. You don't have it at your fingertips? 12:00:50
25 A. Not at my fingertips, no. And these are only a few 12:00:54

1 of the documents. We haven't seen them all yet, 12:00:58
2 either. I haven't seen them all and I would assume, 12:01:00
3 from what I have seen here, that there are probably 12:01:02
4 more that haven't been turned over as yet. 12:01:04
5 Q. I see. Well, just one more question on this -- and 12:01:18
6 this is difficult, I understand it's difficult for 12:01:20
7 you because it is a massive amount of material. 12:01:22
8 On the other hand, the charges are serious 12:01:24
9 charges, and at least as lawyers we are used to 12:01:30
10 asking people, give me a specific example, I won't 12:01:34
11 accept your conclusion. And I know that puts you in 12:01:36
12 a difficult spot in a deposition, but we have to 12:01:40

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13 do -- we both have to do the best we can. 12:01:42

14 Can you identify any specific statement 12:01:46

15 made by Philip Morris about nicotine or about 12:01:52

16 smoking and health prior to 1994? 12:01:58

17 A. Can I identify any statement -- 12:02:00

18 Q. Any specific statement of any kind on the topics of 12:02:06

19 either nicotine or smoking and health? 12:02:14

20 MS. WALBURN: Objection, form. 12:02:14

21 THE WITNESS: That's -- in the context of 12:02:18

22 the whole world? I mean, that's -- 12:02:22

23 BY MR. McDONNELL:

24 Q. Do you have in mind some? 12:02:24

25 MS. WALBURN: Objection, form. 12:02:26

1 THE WITNESS: I mean, there is some in 12:02:34

2 here, but I couldn't -- if you put the time frame on 12:02:36

3 it. Before when? Before 1994? I don't understand 12:02:40

4 that. 12:02:40

5 BY MR. McDONNELL:

6 Q. Public statements. 12:02:40

7 A. Public statements. 12:02:42

8 Q. Public statements. 12:02:42

9 A. Are you referring to public -- 12:02:44

10 Q. Before 1994. 12:02:44

11 A. Before 1994. Oh, I have reviewed some of the public 12:02:50

12 statements, but I couldn't tell you the date nor the 12:02:54

13 time of them, but there are public statements made 12:02:58

14 by the tobacco industry, which comes through the 12:03:04

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15 Tobacco Institute, which -- 12:03:06

16 Q. No, I am asking about Philip Morris specifically. 12:03:08

17 A. Well, I know, but the Tobacco Institute represents 12:03:10

18 all the companies and the Tobacco Institute is part 12:03:12

19 of this whole deal. 12:03:14

20 Q. I mean, you can -- if I ask a question about the 12:03:14

21 Tobacco Institute, I will be glad to hear about it, 12:03:18

22 but for the moment I am just asking about 12:03:20

23 Philip Morris. 12:03:20

24 And I understand you think that everybody 12:03:22

25 is Tweedle Dum and Tweedle Dee, but I am entitled to 12:03:26

1 ask you about Philip Morris, and I am asking you 12:03:28

2 about Philip Morris and whether you can identify any 12:03:32

3 specific public statement made by Philip Morris on 12:03:36

4 any topic relating to smoking and health including 12:03:40

5 nicotine prior to 1994. 12:03:42

6 MS. WALBURN: Well, I am going to object 12:03:44

7 to the form of the question, I am going to object to 12:03:46

8 counsel's speech, and I am going to object to 12:03:48

9 counsel's misrepresentation of the record to the 12:03:50

10 extent counsel is attempting to state that a 12:03:52

11 statement by the Tobacco Institute is not a 12:03:54

12 statement by -- and on behalf of Philip Morris. 12:04:00

13 THE WITNESS: Does that include nicotine 12:04:02

14 addiction? 12:04:02

15 BY MR. McDONNELL:

16 Q. Yes. 12:04:04

17 A. I can't cite you one. There have been several 12:04:06

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18 public statements by the Tobacco Institute. There 12:04:10
19 has been several public statements in newspapers by 12:04:14
20 the various tobacco companies about -- Nicotine 12:04:16
21 Addiction is one that I recall seeing but couldn't 12:04:20
22 tell you who did it or who wrote it or what time 12:04:22
23 frame it was. 12:04:24
24 I mean, I do recall one about nicotine as 12:04:26
25 an addictive substance and denying that it was, but 12:04:30

1 I don't know if it was your company or one of these 12:04:34
2 other companies. 12:04:34
3 Q. I am just -- I am not asking you, of course, for, 12:04:38
4 you know, date, time and place. 12:04:40
5 A. You did. You asked me for something since 1994. 12:04:42
6 Q. Yeah. No, prior to 1994. 12:04:44
7 A. Prior to 1994. 12:04:46
8 Q. But if you can sufficiently identify a specific 12:04:48
9 statement, I mean, I will go try to find it. But I 12:04:52
10 need some help from you in identifying a specific 12:04:56
11 statement. 12:04:56
12 MS. WALBURN: Well, object. 12:04:58
13 BY MR. McDONNELL:
14 Q. You just say you know they are there and you have 12:05:00
15 read them, and I need to know where are they and 12:05:02
16 what are they, and if you can't answer, you can't 12:05:04
17 answer. 12:05:04
18 MS. WALBURN: Well, objection to form. 12:05:08
19 Dr. Hurt has answered. 12:05:08

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20 MR. McDONNELL: I will take that as his 12:05:10

21 answer if that's his answer. Is that his answer? 12:05:14

22 MS. WALBURN: Well, I think the record 12:05:16

23 will speak for itself. 12:05:18

24 MR. McDONNELL: Well, I thought you were 12:05:18

25 speaking for the record. What time are we? 12:05:28

1 (A discussion was held off the

2 record.)

3 MR. McDONNELL: Let's take a short break. 12:05:32

4 It's -- I've been going an hour and ten minutes. 12:05:34

5 All right? 12:05:36

6 VIDEOGRAPHER: We are temporarily going 12:05:38

7 off the video record. 12:05:38

8 (A discussion was held off the

9 record.)

10 VIDEOGRAPHER: We're temporarily going off 12:05:54

11 the video record. The time is now 12:05 p.m. 12:05:58

12 (Whereupon, the noon recess was taken.)

13 VIDEOGRAPHER: We are back on the record. 12:43:02

14 The time is now 12:42 p.m. 12:43:06

15 BY MR. McDONNELL:

16 Q. Dr. Hurt, welcome back. 12:43:06

17 A. Thank you. 12:43:08

18 Q. Would you turn to page 12 of your report, please. 12:43:10

19 A. Okay. 12:43:14

20 Q. Do you see the section entitled Addiction to 12:43:18

21 Nicotine Occurs Among Adolescent Smokers? 12:43:22

22 A. Uh-huh. 12:43:22

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23 Q. I didn't see any support or citation of authority 12:43:26
24 there, and I wondered on what you based the opinions 12:43:30
25 expressed in that paragraph. 12:43:32

1 A. Well, the opinions of the whole report are reflected 12:43:38
2 in my training, my experience as a physician, my 12:43:42
3 experience in treating patients with nicotine 12:43:44
4 dependence, which includes adolescents, my 12:43:46
5 experience in working with adolescent groups in 12:43:50
6 trying to help prevent smoking to begin with and 12:43:52
7 also to help them stop smoking. 12:43:56
8 It includes my review of medical and 12:43:58
9 scientific literature that has to do with smoking, 12:44:00
10 in general, but also specifically doing research in 12:44:04
11 adolescent smokers, and the other part, I guess, 12:44:10
12 would be some of the things that are in the internal 12:44:14
13 documents that I have reviewed. 12:44:14
14 So it's kind of -- it's -- this is the 12:44:16
15 same as the rest of the report. It's what I said at 12:44:20
16 the beginning is my experience and my training and 12:44:24
17 such. 12:44:24
18 Q. Can you point me to any of the public research on 12:44:30
19 smoking by adolescents upon which you rely? 12:44:36
20 A. The one -- we have done one study, which was -- was 12:44:42
21 and still is the only study that's published with 12:44:44
22 regard to nicotine patch therapy in adolescent 12:44:48
23 smokers. I think that's included in the CV. 12:44:50
24 And -- well, maybe it's not in there. I 12:45:02

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25 don't see it. 12:45:04

1 MR. WILSON: We gave it to you yesterday. 12:45:06
2 THE WITNESS: It's an article by Smith. 12:45:08
3 That was just published late last year, I think. 12:45:14
4 That's one of the articles we have written. The 12:45:20
5 other things have to do with our treatment program. 12:45:22
6 Our treatment program has to do with treatment of 12:45:30
7 patients from all ages and walks. 12:45:32
8 MR. McDONNELL: You say you gave it to us 12:45:34
9 yesterday. I just -- I don't recall receiving anything. 12:45:38
10 I may be wrong. 12:45:40
11 MR. WILSON: Yesterday we gave you the 12:45:42
12 entire collection of Dr. Hurt's written works. 12:45:46
13 MR. McDONNELL: I see. 12:45:46
14 MR. WILSON: And one of the articles deals 12:45:50
15 with smoking among adolescents. 12:45:52
16 THE WITNESS: Smoking cessation among 12:45:52
17 adolescents using nicotine patch therapy, and as I said, 12:45:56
18 it's still the only article written about it, and we are 12:45:58
19 currently engaged in research in adolescent smoking 12:46:08
20 cessation, which is probably tougher than anyone ever 12:46:10
21 thought it was. 12:46:10
22 And what we found is that it's -- once 12:46:12
23 they have been smoking for about a year and a half or two 12:46:14
24 years, they look very much like adults. They are very 12:46:18
25 difficult to treat, hard to get them to stop smoking. 12:46:20

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1 Their nicotine dependence is compounded by the fact that 12:46:24
2 they are adolescents, which is another whole story. 12:46:28
3 BY MR. McDONNELL:
4 Q. Would you turn over to page 19, please. 12:46:34
5 A. Okay. 12:46:40
6 Q. The second sentence in the first full paragraph on 12:46:44
7 19 reads, "The technological ability exists to 12:46:46
8 remove virtually all nicotine from cigarettes." 12:46:50
9 What's your basis for that statement? 12:46:52
10 A. I think your company produced a cigarette called 12:46:58
11 Next. I have a package of those cigarettes. It's 12:47:02
12 also mentioned in the internal documents about the 12:47:04
13 ability, using technology from one of the food 12:47:08
14 companies -- I can't remember which one your company 12:47:10
15 owns, but using the technology of decaffeination of 12:47:16
16 coffee, applying that technology to denicotizing 12:47:18
17 nicotine, and there is another -- but, you know, I 12:47:26
18 have a package of Next. They are collectors' 12:47:28
19 items. They are kind of few and far between. 12:47:32
20 I understand there is a brand of Next 12:47:32
21 that's being produced in another part of the world, 12:47:36
22 I think it's in Japan, but I think it contains 12:47:38
23 nicotine, whereas the one that was produced in the 12:47:42
24 U.S. by Philip Morris was denicotinized. That's 12:47:46
25 what it says on the package, denicked, 12:47:48

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1 denicotinized. 12:47:50
2 And then on page -- document from -- from 12:47:56
3 somebody. The page numbers are 50540827. When it 12:48:10
4 talks about ammonia is used by R.J. Reynolds 12:48:12
5 Tobacco -- R.J. -- RT in the following tobacco 12:48:16
6 processing operations, denicotinization of burley 12:48:20
7 tobacco. I mean, so there is -- you can -- your 12:48:22
8 company can do that. 12:48:24
9 Q. Do you know how that technology works? 12:48:30
10 MS. WALBURN: Objection, form. 12:48:32
11 THE WITNESS: Which -- you are talking 12:48:34
12 about technology to take nicotine out of -- 12:48:36
13 BY MR. McDONNELL:
14 Q. Yes. 12:48:36
15 A. -- cigarettes? Oh, I have seen reference to 12:48:40
16 different things. You know, this is -- in this one 12:48:42
17 page it talks about denicotinization. It -- the 12:48:48
18 process isn't spelled out here and I -- I am not a 12:48:52
19 tobacco company and I don't -- I wouldn't know what 12:48:54
20 the process is, but it's -- some of these documents 12:48:58
21 clearly spell out more in-depth technological stuff 12:49:02
22 than others do. 12:49:02
23 Q. Do you know whether the process which Philip Morris 12:49:04
24 employed to produce the product that you have 12:49:08
25 referred to as Next removed components of tobacco 12:49:14

1 other than nicotine? 12:49:16
2 A. I haven't seen an internal document about 12:49:20
3 Philip Morris's technology. There has been some 12:49:24

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4 guesses, I think, from some of the other companies 12:49:26
5 as to the technology and what they did. 12:49:28
6 One thing I do know for certain, it didn't 12:49:30
7 sell. You can't sell a cigarette without nicotine 12:49:34
8 because nicotine is the addicting drug in cigarettes 12:49:36
9 and so Next is a collectors' item because of it. 12:49:40
10 Q. Do you know anything about the sales effort when 12:49:42
11 Next was initiated or introduced? 12:49:44
12 A. Actually, I remember when it was introduced and I 12:49:50
13 remember some things about it, but I haven't gone 12:49:52
14 into those kind of documents here. 12:49:54
15 Q. You don't know where it was test-marketed? 12:49:56
16 A. No. 12:50:00
17 Q. You don't know what the response was? You just know 12:50:04
18 it's not on the market? 12:50:06
19 A. It's not on the market, so if it had been successful 12:50:10
20 like Marlboro, you would be able to go downstairs 12:50:12
21 and buy some somewhere, and the facts are that you 12:50:16
22 can't. 12:50:16
23 And so -- and, in fact, the other 12:50:18
24 documents talk about if you take all the nicotine 12:50:20
25 out of cigarettes, one says -- I'll paraphrase it. 12:50:24

1 I could quote it for you if you want. I could find 12:50:32
2 the document to quote from if you want, but I will 12:50:34
3 paraphrase. 12:50:34
4 One of the documents says that if we take 12:50:38
5 the nicotine out of our product, then that will be 12:50:40

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6 the end of our business. I think that pretty well 12:50:44
7 says it all. 12:50:46
8 Q. I want to refer you to a statement you made 12:50:52
9 yesterday, Doctor, and it's -- I am going to hand 12:50:58
10 you the page of the transcript that I have here, and 12:51:04
11 I think it's at page 154 of the transcript that 12:51:06
12 counsel has, but let me hand this to you and bracket 12:51:12
13 what I want you to look at. 12:51:14
14 MS. WALBURN: And I am going to again 12:51:16
15 object to the continuing violation of the orders of 12:51:20
16 the Court and counsel's representations yesterday 12:51:22
17 about the proceeding of this deposition and put 12:51:26
18 counsel on notice that we are not going to let it 12:51:28
19 proceed like this indefinitely. 12:51:32
20 THE WITNESS: And I will need the page in 12:51:42
21 front of and behind it to know the context in which 12:51:46
22 this was done. 12:51:46
23 BY MR. McDONNELL:
24 Q. 149. You want 147 as well; is that right? 12:52:06
25 (Indicating.) 12:52:10

1 A. It's -- okay. So on the page before we are talking 12:52:26
2 about financial interests and contracts, and this 12:52:28
3 question has to do, "Do you believe that there is a 12:52:30
4 known quantity of nicotine in a cigarette that is 12:52:32
5 below the threshold at which nicotine is 12:52:34
6 addictive?" Is that your question? 12:52:36
7 Q. Right, and your response, would you read your 12:52:38
8 response aloud. 12:52:38

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9 A. "I think there is, and I think it's just yet to be 12:52:44
10 defined. One of the documents I reviewed defines 12:52:46
11 what's considered to be a threshold but it's done in 12:52:50
12 the other sense, it's done in this is the threshold 12:52:52
13 we have to be sure we have in order for it to be an 12:52:58
14 addicting substance," which is a little different 12:52:58
15 than the way that I, as an addictionologist, would 12:53:02
16 look at it. 12:53:02
17 I would want to know the threshold below 12:53:04
18 which the delivery of nicotine would be 12:53:06
19 non-addicting and use it in that sense. That's what 12:53:10
20 I said. 12:53:10
21 MR. McDONNELL: Okay. I would ask the 12:53:12
22 reporter to mark for identification the documents 12:53:16
23 that I am handing her. 12:53:18
24 (Defendants' Deposition Exhibit 2469 12:53:44
25 was marked for identification.) 12:53:46

1 BY MR. McDONNELL:
2 Q. Doctor, will you take a look at that document and my 12:53:48
3 question will be, which may aid you in going through 12:53:52
4 it, is that the document to which you referred in 12:53:54
5 the portion of your testimony that you just read? 12:53:58
6 MS. WALBURN: I am going to object to 12:54:02
7 form, and while Dr. Hurt is looking at the document, 12:54:04
8 I am assuming it's your representation, Counsel, 12:54:06
9 that this is among the documents listed in 12:54:08
10 Dr. Hurt's disclosure? 12:54:10

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11 MR. McDONNELL: Yes. 12:54:12

12 THE WITNESS: Just one second. This is 12:54:44

13 the document. If you look at my expert report from 12:54:46

14 page 19, this is -- this is the area where I think 12:54:56

15 we have the statement "A threshold exists 12:55:00

16 somewhere," but I need to find it in the -- I am 12:55:10

17 reading the -- 12:55:16

18 BY MR. McDONNELL:

19 Q. If it helps, I think you have it highlighted on the 12:55:18

20 second page. 12:55:18

21 A. On the second -- okay. Yeah, that's where -- 12:55:26

22 that's where the quote comes from. "This suggests 12:55:28

23 that with respect to the conditions of our 12:55:38

24 experiment" . . . "a threshold exists somewhere 12:55:40

25 between 0.1 and 0.3 mgs of nicotine." 12:55:44

1 That's where the quote came from. And 12:55:48

2 that's -- is that your question? 12:55:50

3 Q. I just -- my question was, is that the same 12:55:54

4 document? And I think you have answered that. 12:55:56

5 A. I think it is the same document. There are other 12:56:00

6 documents that speak to threshold, but this is one 12:56:04

7 that talks about threshold specifically as it 12:56:06

8 relates to the physiological response that they were 12:56:08

9 measuring in this experiment. 12:56:08

10 Q. What you said yesterday, and what you read into the 12:56:12

11 record a moment ago, is that "One of the documents I 12:56:14

12 reviewed defines what's considered to be a threshold 12:56:18

13 but it's done in the other sense, it's done in this 12:56:20

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14 is the threshold we have to make sure we have in 12:56:24
15 order for it to be addicting," and I want you to 12:56:28
16 point to me -- point me to anything in the document 12:56:30
17 that supports that statement. 12:56:34
18 A. Oh, this statement -- this statement has to do with 12:56:40
19 the threshold dose of nicotine as far as what I have 12:56:42
20 said in my expert report, and that's what this 12:56:46
21 document says. 12:56:48
22 Q. But what you said about it yesterday, Doctor, was 12:56:50
23 that the document -- and I think we have agreed we 12:56:52
24 are talking about the same document, it's -- in that 12:56:56
25 document, it's done in the other sense, it's done 12:56:58

1 in this is the threshold we have to make sure we 12:57:02
2 have in order for it to be an addicting substance, 12:57:06
3 which is a little different than the way I would 12:57:08
4 look at it. 12:57:10
5 A. Let me just see what I said again and I can -- 12:57:12
6 Q. (Indicating.) 12:57:14
7 A. Because I remember the statements before this had to 12:57:20
8 do with financial interests, industry relationships, 12:57:22
9 contracts, and what you said here, "Do you believe 12:57:26
10 that there is a known quantity of nicotine in a 12:57:34
11 cigarette that is below the threshold at which 12:57:36
12 nicotine is addictive?" That was your question. 12:57:38
13 And I said one of the documents. I did not say 12:57:44
14 which one of the documents. 12:57:46
15 This document speaks to -- the document we 12:57:48

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16 are talking about, which is marked as Exhibit 2469, 12:57:50
17 speaks to a threshold dose of nicotine. In this 12:57:56
18 answer we did not identify that as the document we 12:58:00
19 were talking about. 12:58:00
20 Q. Well, that's the question I am asking you. Is that 12:58:02
21 the document that you were talking about when you 12:58:06
22 gave the answer that you gave yesterday? 12:58:08
23 MS. WALBURN: Objection, form. 12:58:10
24 THE WITNESS: You know, I have reviewed a 12:58:10
25 lot of documents, and what I would point you to is 12:58:14

1 the document with the Bates Number 102226317, which 12:58:22
2 says, "If delivery levels are reduced too quickly or 12:58:26
3 eventually to a level which is so low that the 12:58:28
4 nicotine is below the threshold of pharmacologic 12:58:32
5 activity, then it is possible that the smoking habit 12:58:36
6 would be rejected by a large number of smokers." 12:58:38
7 BY MR. McDONNELL:
8 Q. Okay. 12:58:38
9 A. There are multiple documents that speak to the 12:58:42
10 threshold, and they speak to the threshold in 12:58:44
11 different ways. This document speaks to the 12:58:46
12 threshold with regard to the evoked potential 12:58:52
13 response, which is a neuroelectro physiologic 12:58:58
14 response that you measure from EEGs. That's what 12:59:00
15 the Philip Morris document has to do with the 12:59:02
16 threshold, but that measures a physiological 12:59:04
17 response, and what I said in my testimony yesterday, 12:59:12
18 I said "one of the documents" and we did not specify 12:59:14

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19 then which one. 12:59:14

20 Q. I am just asking. 12:59:16

21 A. This is one of them that would be more -- 12:59:16

22 Q. This other one? 12:59:18

23 A. This one would be, and there are more. I mean, 12:59:18

24 that's -- there is -- a lot of documents talk about 12:59:20

25 threshold. 12:59:20

1 Q. I am just asking you if this document is the 12:59:22

2 document you were referring to. 12:59:24

3 MS. WALBURN: Objection, asked and 12:59:26

4 answered. 12:59:26

5 BY MR. McDONNELL:

6 Q. That's all I am asking, Doctor. 12:59:28

7 A. The answer is no. We didn't identify it yesterday 12:59:30

8 and -- 12:59:30

9 Q. I understand. You referred to the evoked response 12:59:36

10 or evoked potential response. Do you understand how 12:59:38

11 the experiment described in this document is 12:59:42

12 performed? 12:59:42

13 A. Oh, only in broad terms as far as the way that would 12:59:48

14 be done. I don't -- there is not enough detail in 12:59:50

15 this document. I mean, this is describing an 12:59:54

16 experiment that results in discussion in two pages. 12:59:56

17 That's not a -- that's a very -- I would need more 13:00:02

18 information from the experiment to see, you know, 13:00:04

19 what they actually did. 13:00:06

20 Q. He says -- or they say in an early -- in the first 13:00:10

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21 line, "In an earlier memo (January 8, 1982) we 13:00:14
22 described how cigarettes of different nicotine 13:00:18
23 deliveries affected the pattern reversal evoked 13:00:22
24 potential." 13:00:22
25 Did you ask to be provided with the 13:00:24

1 earlier memo? 13:00:24
2 A. I can't remember. 13:00:26
3 Q. Okay. You don't remember if you have seen it? 13:00:28
4 A. I don't remember if I have seen it. This was dated 13:00:32
5 January of '82, and there was -- this prior memo was 13:00:36
6 January 8, '82, and I could have, maybe not, but 13:00:42
7 this is a lot of documents. 13:00:42
8 Q. You don't know how many smokers were involved in 13:00:46
9 this experiment? 13:00:46
10 A. In this study? 13:00:48
11 Q. Yeah. 13:00:48
12 A. It doesn't say. 13:00:50
13 Q. You don't know whether they were --
14 A. I should read it. It says "The subjects and 13:00:56
15 cigarettes employed in the current study were the 13:00:58
16 same as those described in the memo of January 8." 13:01:02
17 There is nowhere in here that tells us the 13:01:04
18 number of subjects. They smoked three medium -- .3 13:01:10
19 milligram cigarettes, and then they looked at the 13:01:14
20 responses and they said that they thought there was 13:01:16
21 a threshold somewhere between .1 and .3 milligrams 13:01:20
22 of nicotine. 13:01:20
23 Q. And the threshold was the threshold above and below 13:01:26

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24 which -- above which the researcher got an 13:01:30
25 electrophysiological response on the EEG; is that -- 13:01:34

1 is that the way you understand that? 13:01:34
2 A. That's the way I understand what they wrote, but 13:01:40
3 then they go on to say, "For example, CNS effects 13:01:44
4 might be obtained with a 0.1 milligram cigarette if 13:01:46
5 the subjects were allowed to take more puffs, take 13:01:50
6 puffs closer together, etc." 13:01:52
7 So this was a controlled experiment in 13:01:54
8 some regards as far as how -- what type of 13:01:56
9 cigarettes they were able to use, how they smoked 13:02:00
10 them, and so on. 13:02:00
11 So there was some control there, so they 13:02:02
12 don't say that that is the absolute lowest, but they 13:02:04
13 kind of qualify it at the end, but they use the 13:02:08
14 term, which is of interest, which is threshold. 13:02:10
15 And threshold for measuring the 13:02:12
16 physiologic response of a drug, particularly of a 13:02:16
17 drug of addiction, is looking for kind of the 13:02:20
18 minimum dose that you need to -- kind of like one of 13:02:22
19 the other documents says, how low can we go, how low 13:02:26
20 a level of nicotine can we go and maintain this 13:02:30
21 addiction. 13:02:30
22 Q. But threshold is also used in other senses; is it 13:02:34
23 not? 13:02:36
24 MS. WALBURN: Objection, form. 13:02:38
25 THE WITNESS: In this sense it's used in 13:02:40

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terms of a physiological response in the central 13:02:48
nervous system of smokers, and there aren't many 13:02:52
reasons to measure that except to know what effect 13:02:54
it's having on the brain. 13:02:56
Remember, this is a long time ago, and so 13:02:58
they may not have had quite as much knowledge about 13:03:00
receptors as they currently do, so this is one way, 13:03:02
and a relatively crude way at that time, of 13:03:06
measuring -- maybe the state of the art at that 13:03:08
time, but relatively crude way of measuring 13:03:10
responses. 13:03:10
So it's measuring a CNS response is what 13:03:14
it was doing. I don't think they were doing it just 13:03:18
to see if it kept them awake. 13:03:20
(Defendants' Deposition Exhibit 2470 13:03:42
was marked for identification.) 13:04:24
BY MR. McDONNELL:
Q. Do you recall seeing this document yesterday? 13:04:24
A. Uh-huh, I do. 13:04:26
Q. And do you recall what your testimony was with 13:04:28
respect to it? 13:04:28
MS. WALBURN: I am going to object to the 13:04:30
form and I am going to object to counsel's 13:04:32
persistence in violating the case management order 13:04:34
with a tag team approach in duplicative testimony. 13:04:38

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1 MR. McDONNELL: I am just -- I am trying 13:04:40
2 to lay a foundation. 13:04:40
3 BY MR. McDONNELL:
4 Q. But Doctor, you can answer. 13:04:42
5 A. I recall seeing this document. I know we talked 13:04:44
6 about it, but recalling my testimony, I would have 13:04:46
7 to look at what I said. 13:04:48
8 Q. Let me just point out a couple of things to you and 13:04:54
9 ask you if you -- do you understand this document to 13:04:58
10 have been generated 24 June 94? 13:05:02
11 A. Actually, no. That's a date on this document, and 13:05:12
12 that's the only date, and it looks like it comes 13:05:14
13 across the top as an appendix to something else, 13:05:18
14 Appendix 1. I don't know what it was appended to. 13:05:22
15 Q. Well, turn the page, Doctor, and isn't the next page 13:05:24
16 Appendix 1? 13:05:26
17 A. Well, the first page has Appendix 1. It's a little 13:05:32
18 bit confusing the way it's highlighted so I couldn't 13:05:36
19 tell when I looked at this what the date actually 13:05:38
20 was. It likes like this first line, "X:\SP" -- it 13:05:40
21 looks like probably a computer signature of where 13:05:42
22 this was. 13:05:44
23 So I don't know if that's the computer 13:05:46
24 signature about when the document was printed or 13:05:48
25 when the actual work was done. There is no way of 13:05:50

1 knowing. 13:05:52

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2 Q. Okay. 13:05:52
3 A. Maybe you can tell me when it was, but I couldn't 13:05:56
4 tell you for certain when this took place. 13:05:58
5 Q. Well, I think yesterday you said, Doctor, you 13:06:02
6 thought it was done in 1994. I will represent to 13:06:06
7 you that it was done in June 1994. You can accept 13:06:10
8 or not accept that as you want. 13:06:12
9 A. Okay. 13:06:12
10 Q. Are you able to follow what these various paragraphs 13:06:26
11 describe? 13:06:28
12 MS. WALBURN: Objection, form. 13:06:30
13 THE WITNESS: In what respect, follow 13:06:32
14 meaning understand what they say? 13:06:32
15 BY MR. McDONNELL:
16 Q. Yeah. I mean, the second paragraph begins with "The 13:06:36
17 argument that bases are added to increase the 13:06:40
18 nicotine delivery above normal levels is entirely 13:06:42
19 specious." 13:06:44
20 Do you know what that argument that that's 13:06:48
21 responding to is -- 13:06:48
22 THE WITNESS: Don't know. 13:06:50
23 MS. WALBURN: Objection, form. 13:06:52
24 THE WITNESS: It sure doesn't fit with the 13:06:54
25 rest of the paragraph because the rest of the 13:06:56

1 paragraph goes on to say that it's not only not 13:07:00
2 specious, that indeed, it's true. 13:07:02
3 I mean, so I don't know, the argument that 13:07:04
4 bases are added to increase the nicotine delivery 13:07:08

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5 above normal levels is entirely specious. I mean, 13:07:10
6 it's -- I don't know where that statement came 13:07:14
7 from. 13:07:14
8 It doesn't seem to fit in the context of 13:07:16
9 what otherwise is a description of some interesting, 13:07:20
10 more pharmacologic and physiological information. I 13:07:24
11 don't know -- that seems almost like a political 13:07:26
12 statement. 13:07:28
13 BY MR. McDONNELL:
14 Q. But you view the -- you view that sentence as 13:07:30
15 inconsistent with the remainder of the content of 13:07:34
16 the document? 13:07:34
17 MS. WALBURN: Objection, asked and 13:07:36
18 answered. 13:07:36
19 MR. McDONNELL: I am just trying to 13:07:38
20 understand what he is saying. 13:07:40
21 THE WITNESS: Well, the argument says that 13:07:42
22 bases are not added to increase the nicotine 13:07:44
23 delivery above normal levels is entirely specious. 13:07:48
24 And in about one, two, three, four, five 13:07:50
25 lines later describing a study that they did, it 13:07:54

1 says "It was found that higher peak concentrations 13:07:58
2 of nicotine in the blood were achieved at higher 13:08:00
3 pHs. Since the amounts of inhaled nicotine were the 13:08:04
4 same, the results indicate that the higher the pH, 13:08:06
5 the more rapidly nicotine enters the blood stream," 13:08:10
6 which seems to me to contradict what the first 13:08:12

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7 sentence was, which says that it's specious. 13:08:16

8 BY MR. McDONNELL:

9 Q. Will you read the sentence immediately after the 13:08:18

10 sentence that you stopped at, "Eventually." 13:08:22

11 A. "Eventually, of course, all of the nicotine, 13:08:26

12 regardless of pH, would enter the blood stream. 13:08:30

13 Only rate of entry is pH dependent." 13:08:34

14 Q. Do you -- did you note that in the -- if you look at 13:08:38

15 the first sentence, that the term pH is put in 13:08:44

16 quotation marks in some instances and not in other 13:08:46

17 instances? Did you notice that? 13:08:48

18 A. I can't say that I did. 13:08:50

19 Q. Do you have any idea why it's in quotation marks 13:08:54

20 when it's in quotation marks? 13:08:56

21 A. No. 13:09:00

22 Q. Do you know -- 13:09:04

23 A. I don't -- 13:09:04

24 Q. Do you know how the pH of smoke, cigarette smoke, is 13:09:08

25 ascertained? 13:09:08

1 A. Oh, I have some feel for that as far as the way it's 13:09:14

2 done, but I do not know the absolute technology of 13:09:18

3 it. Again, you know, we are dealing with technology 13:09:20

4 that is not something that I do on a daily basis. I 13:09:26

5 measure nicotine levels in the blood and I know some 13:09:28

6 of the procedures about that but not the technique. 13:09:30

7 Q. No, but smoking an aerosol, as you pointed out 13:09:36

8 yesterday, how do you determine the pH of an 13:09:38

9 aerosol, just in general -- I know you don't know 13:09:40

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10 the specifics, but just in general, how do you do 13:09:42
11 it? 13:09:42
12 MS. WALBURN: I am going to object to this 13:09:44
13 line of questioning, again, as a violation of the 13:09:46
14 case management order, and you are reaching our 13:09:48
15 limits, Counsel. 13:09:50
16 THE WITNESS: Well, you have to -- in 13:09:52
17 order to measure pH you have to have it in a 13:09:54
18 solution of some sort so you can measure that. 13:09:56
19 So I am not sure how they do it with 13:10:00
20 what's called the Cambridge filter or whatever is 13:10:02
21 used to do that, what solution it's added to or 13:10:06
22 what's put in, but that's -- you have to have it 13:10:08
23 into a solution in order to be able to measure the 13:10:10
24 pH. 13:10:12
25 BY MR. McDONNELL:

1 Q. And do you know whether it's possible that combining 13:10:18
2 the aerosol with a solution would change the pH? 13:10:20
3 A. Depends on the solution. If the pH of the solution 13:10:24
4 is very high, it will obviously change the pH, so -- 13:10:28
5 Q. The pH of the smoke? 13:10:30
6 A. Well, sure. It depends on the solution it's in, 13:10:34
7 depends on how much other things are added to it. 13:10:36
8 So additives will change -- will change pH, sure. 13:10:38
9 Q. Is there a solution which will not affect the pH of 13:10:42
10 the smoke? 13:10:42
11 A. Water has a neutral pH, and I don't know that that's 13:10:46

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what they use for this, but that would be probably 13:10:50
the ideal solution, if it has a neutral pH. 13:10:54
Q. And then you would be able to get the pH of the 13:10:58
smoke uninfluenced by the pH of the water? 13:11:02
A. You know, you have gotten down to a level that 13:11:04
people that do this in their laboratories at the 13:11:08
tobacco companies might be able to tell you. 13:11:10
What is interesting is that I don't know 13:11:22
what -- in that first sentence in the second 13:11:24
paragraph, what "above normal levels" is. I mean, 13:11:28
that -- to me normal means that there is this 13:11:32
present, like you'd have a normal blood sugar or you 13:11:36
have a blood sugar that there is a normal range for 13:11:38
it. 13:11:38

I don't understand what normal levels of 13:11:42
nicotine are. 13:11:42
Q. I understand. 13:11:44
A. I mean, that's -- if you have a newborn baby, unless 13:11:48
it's the child of a smoking mother, a newborn child 13:11:52
will not have normal nicotine levels. 13:11:56
Q. And you regard the reference to normal as a 13:11:58
reference to the nicotine level in a subject; is 13:12:02
that right?
A. I don't know what -- 13:12:04
MS. WALBURN: Objection, form. 13:12:06
BY MR. McDONNELL:
Q. You just don't know? 13:12:06
A. I don't have a clue as to what -- I don't know what 13:12:08

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15 a normal level of nicotine would be. 13:12:10

16 Q. That's fair enough. 13:12:12

17 A. That's -- it sounds abnormal to be talking about 13:12:16

18 normal levels of an addictive substance. 13:12:20

19 Q. I understand that it sounds abnormal. 13:12:22

20 A. I don't think that we would be talking about normal 13:12:24

21 levels of alcohol or normal levels of cocaine or 13:12:28

22 normal levels of heroin. I don't think I have ever 13:12:30

23 heard that talked about that way. Even in heroin 13:12:34

24 addicts we don't talk about a normal level of the 13:12:38

25 substance. 13:12:40

1 Q. Thank you for those observations, Doctor. 13:12:40

2 A. I just hadn't noticed it again until I read it. 13:12:44

3 Q. I understand you have now noticed it and given us 13:12:46

4 the benefits of your thoughts on it. 13:12:48

5 Do you understand the graph on page 2? 13:12:50

6 MS. WALBURN: Objection to form, objection 13:12:54

7 that this graph was specifically discussed 13:12:54

8 yesterday. 13:12:56

9 Counsel, you might want to talk to your 13:12:58

10 co-counsel about how you are using your time because 13:13:02

11 this deposition is going to end in a timely fashion 13:13:04

12 and we are not going to have duplicative testimony. 13:13:06

13 MR. McDONNELL: I thank you for your 13:13:08

14 advice, Counsel. 13:13:10

15 THE WITNESS: Understand it in what way? 13:13:14

16 I mean, some of the terms -- I mean, I -- in the 13:13:20

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17 general gist of things, I understand the display. 13:13:24
18 But in the absence of a legend that really goes into 13:13:28
19 some detail, most scientific graphs or figures will 13:13:32
20 have a figure and underneath the figure they will 13:13:34
21 say, well, this is -- this -- just say "NIC 13:13:38
22 represents nicotine" and give some information, so 13:13:42
23 this is a little sparse from a scientific 13:13:46
24 standpoint. 13:13:48
25 BY MR. McDONNELL:

1 Q. Do you believe that nicotine contributes to a 13:13:50
2 smoker's sensory or sensorial experience? 13:13:54
3 MS. WALBURN: Objection, form. 13:13:56
4 THE WITNESS: What senses? Senses are -- 13:14:00
5 there are seven of them. Which ones? 13:14:02
6 BY MR. McDONNELL:
7 Q. Any. 13:14:04
8 A. Most people would tell you that they don't find 13:14:10
9 cigarette smoke to be particularly attractive to 13:14:16
10 smell. That would be one. 13:14:16
11 Even in -- even in smokers, if you ask 100 13:14:20
12 smokers are you offended by someone else's cigarette 13:14:24
13 smoke, almost -- actually, 46 percent will say that 13:14:26
14 they are, so that's a sense of smell that -- so 13:14:30
15 that's a sense, if you will. 13:14:30
16 Q. So you would disagree with the statement that 13:14:32
17 cigarette smoke contributes to taste or flavor? 13:14:38
18 MS. WALBURN: Objection, form. 13:14:40
19 THE WITNESS: That's kind of a backwards 13:14:42

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20 question. Would I agree with the statement that 13:14:44
21 cigarette smoke has something to do with taste or 13:14:46
22 flavor? Taste or flavor is in -- in people -- your 13:14:52
23 companies add all kinds of stuff to cigarettes to do 13:14:56
24 something about that. So flavor is something that 13:15:02
25 is talked a lot about here. 13:15:04

1 When it comes to the importance of the 13:15:06
2 person with nicotine dependence, they don't talk 13:15:10
3 about flavor; they talk about withdrawal symptoms, 13:15:16
4 they talk about the hit or the kick, as the terms 13:15:18
5 are here, and what the nicotine does to the brain. 13:15:20
6 Those other things -- because like I 13:15:20
7 explained yesterday, I couldn't smoke three packs of 13:15:24
8 cigarettes a day without having some kind of break 13:15:26
9 in my mouth, and so I chose to have some menthol in 13:15:30
10 my own personal experience, so flavor and taste have 13:15:34
11 something to do with this. 13:15:36
12 BY MR. McDONNELL:
13 Q. Do you recognize the existence of a field called 13:15:38
14 flavor technology? 13:15:40
15 A. I am sure it exists but I don't -- I couldn't tell 13:15:48
16 you. There is a guy that sent me stuff from Texas 13:15:52
17 for aroma therapy to help people stop smoking, so 13:15:54
18 there is probably a field of aroma technology. 13:15:58
19 Flavor technology is not something that I have 13:16:00
20 studied. 13:16:00
21 Q. You don't hold yourself out as any kind of an expert 13:16:04

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22 in flavor technology? 13:16:04

23 A. Flavor technology as it relates -- or flavor as it 13:16:10

24 relates to what we are talking about here as far as 13:16:12

25 nicotine dependence, the treatment of patients, what 13:16:16

1 cigarettes do to them, and the purported flavor -- 13:16:20

2 importance as a part of the industry's thoughts, 13:16:26

3 yeah, I know a lot about that, but as far as can I 13:16:28

4 tell you about flavor of spearmint gum, I don't 13:16:34

5 pretend to know about that. 13:16:36

6 Q. Do you -- you understand the mechanisms by which 13:16:38

7 flavor works? 13:16:40

8 MS. WALBURN: Objection, form. 13:16:46

9 THE WITNESS: Mechanisms in the respect of 13:16:48

10 what, what it does in the mouth or what it does in 13:16:50

11 the nose? To some degree I -- you know, when you 13:16:54

12 have -- there are certain parts of the tongue that 13:16:56

13 respond to different things like bitter, like sweet, 13:16:58

14 like salt, so those physiological things that I had 13:17:02

15 studied in medical school, I understand some of 13:17:04

16 those things, but as far as beyond that, it would be 13:17:12

17 only in the context of my patients don't talk to me 13:17:14

18 about flavor. 13:17:16

19 BY MR. McDONNELL:

20 Q. Do you recall from medical school days what organs 13:17:20

21 are enervated by the trigeminal nerve? 13:17:22

22 A. Oh, the trigeminal nerve is the fifth -- fifth 13:17:26

23 cranial nerve. It has three branches that go out 13:17:30

24 into this part of the face and into the side of the 13:17:34

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25 tongue. I would have to go back and review all the 13:17:38

1 anatomy about the trigeminal nerve. 13:17:40
2 In the context of people that have tic 13:17:42
3 doloreaux, which is trigeminal neuralgia, they will 13:17:46
4 have paralysis and they will have disorders and they 13:17:48
5 will have pain in the distribution of whichever part 13:17:52
6 of the trigeminal nerve is involved. 13:17:54
7 People with herpe zoster, shingles, can 13:17:58
8 have any one of the three trigeminal branches 13:18:02
9 involved. 13:18:02
10 I mean, I don't -- in order to practice 13:18:04
11 medicine I don't need to know which branches do 13:18:06
12 what. I need to know -- to recognize what the 13:18:10
13 trigeminal nerve is and what it does, and so on. In 13:18:12
14 that respect, I think I know that. 13:18:14
15 Q. Are there foods that you believe people like or 13:18:28
16 dislike because of their trigeminal effects? 13:18:34
17 A. Never thought about it. 13:18:36
18 Q. Let me just ask you one last brief set of questions, 13:18:44
19 Doctor. I just want to get a sense -- we have 13:18:46
20 talked about cessation efforts and failed cessation 13:18:52
21 efforts and unsuccessful attempts to quit. 13:18:56
22 If you had somebody come to your -- if you 13:18:58
23 had somebody come to your clinic and say, "Dr. Hurt, 13:19:00
24 I want to sign up for your smoking cessation 13:19:04
25 clinic," and he came and he went to the first 13:19:08

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meeting or the first two meetings, and then he came 13:19:10
to you again and said, "I have been thinking about 13:19:12
it. I really like smoking and I don't want to give 13:19:14
up smoking so I am going to drop out of your 13:19:18
cessation clinic, I won't be there again," do you 13:19:22
regard that as a failed cessation effort? 13:19:24
A. Depends on what we set up after that. That happens. 13:19:32
Q. He says, "I don't want to come again. Thank you, 13:19:34
Doctor, it's been nice knowing you, maybe we will 13:19:36
meet in a deposition sometime, but that's it." 13:19:40
A. We have had patients like that. The way we assess 13:19:44
success or failure really is probably too much 13:19:48
focused on the outcome of abstinence. 13:19:54
Stopping smoking is a process that 13:19:56
sometimes takes a long time, and so we engage 13:20:00
patients in that process, and even though that 13:20:04
person may have said, "I am not planning to come 13:20:06
back, I am through with this," I would leave the 13:20:08
door open for that individual because I know for a 13:20:12
fact that if that person continues to smoke, there 13:20:14
is a high likelihood they are going to die of 13:20:18
tobacco-related diseases, so success or failure has 13:20:22
to do with where they are in the process. 13:20:24
Q. But if he -- if he didn't come back and it's -- I am 13:20:28
asking you to assume this -- would you regard him as 13:20:32

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1 a guy who tried to stop smoking and just couldn't do 13:20:34
2 it? 13:20:34
3 A. I would regard him just like I said, as being in the 13:20:38
4 process of stopping smoking and would be classified 13:20:44
5 as one of those maybe contemplators, but not ready 13:20:48
6 to go to action. 13:20:48
7 Q. Well, in my hypothetical he doesn't stop smoking. 13:20:58
8 You understand that? 13:20:58
9 A. Right. And rather than meeting him in a deposition 13:21:00
10 I would more than likely meet him in the coronary 13:21:04
11 care unit or in the hospital for his tobacco-related 13:21:06
12 diseases and at that time we would talk again about 13:21:08
13 his nicotine addiction. 13:21:10
14 Q. And you would think about him that he should have 13:21:16
15 stopped? 13:21:16
16 A. A person who is continuing to use a drug despite 13:21:26
17 having the desire, at least on his part at some 13:21:28
18 point to stop smoking, so he had moved from being a 13:21:32
19 precontemplater to a contemplater, he had moved to 13:21:36
20 preparation, he hadn't moved to action yet, so this 13:21:38
21 is a process, this is not something that's a black 13:21:40
22 and white issue. 13:21:42
23 Q. I understand. 13:21:42
24 A. It is a process. So I would engage him at some 13:21:46
25 point in the future, I would leave the door open to 13:21:48

1 him to access our sevices, and we might meet again, 13:21:54
2 we might not. 13:21:54

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3 Q. But would you just answer the last question I put, 13:22:00
4 which is you would say that person should have 13:22:04
5 stopped smoking. I can't believe you wouldn't say 13:22:10
6 that based on everything else you have said. 13:22:12
7 A. I would encourage him to try again. 13:22:14
8 Q. And you think he should stop? 13:22:16
9 A. I would encourage him to try again. 13:22:18
10 MR. McDONNELL: Okay, Doctor. Let's take 13:22:20
11 a break. 13:22:20
12 VIDEOGRAPHER: Temporarily going off the 13:22:22
13 video record. Time is now 1:22 p.m. 13:22:28
14 MR. McDONNELL: Thank you, Doctor. 13:30:24
15 (A recess was taken.)
16 VIDEOGRAPHER: We are back on the video 13:33:56
17 record. This is the 7th tape in the videotaped 13:33:58
18 deposition of Dr. Richard Hurt. The time now is 13:34:02
19 1:33 p.m. 13:34:04
20 EXAMINATION 13:34:06
21 BY MR. LOSS:
22 Q. Dr. Hurt, my name is Greg Loss and I represent 13:34:10
23 British-American Tobacco Company, sometimes referred 13:34:12
24 to as B.A.T. Co., and British American Tobacco, U.K. 13:34:16
25 and Expert, sometimes referred to as Batuke. 13:34:20

1 Before we get going, here, do you know if 13:34:24
2 B.A.T. Co. or Batuke have ever been a member of The 13:34:28
3 Tobacco Institute?
4 A. I think the Tobacco Institute represents the tobacco 13:34:36
5 industry. I guess I have never really looked to see 13:34:40

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6 if those names are in that -- I have never looked at 13:34:44
7 a listing. 13:34:44
8 Q. So you don't know? 13:34:46
9 A. The assumption is that the Tobacco Institute 13:34:50
10 represents the tobacco industry and I guess -- 13:34:52
11 Q. Is it your assumption that it represents the U.S. 13:34:56
12 tobacco industry or the tobacco industry worldwide? 13:34:58
13 A. I think it actually represents the tobacco industry 13:35:02
14 that -- the people that are involved with it are, 13:35:06
15 and, you know, historically your company had its 13:35:12
16 origins out of the American Tobacco industry when 13:35:16
17 Buck Duke and Empirical Tobacco decided to divide up 13:35:20
18 the world, so British American Tobacco was part of 13:35:24
19 that and then Brown & Williamson became part of that 13:35:28
20 as far as a U.S. location for another branch. 13:35:32
21 So it becomes kind of fuzzy as far as what 13:35:34
22 is represented in the tobacco industry, and since 13:35:40
23 there is cross-referencing of your documents from 13:35:44
24 B.A.T. with Brown & Williamson, it's hard to tell 13:35:50
25 who is playing on first and who isn't. 13:35:52

1 MR. LOSS: Move to strike as 13:35:54
2 non-responsive. 13:35:54
3 BY MR. LOSS:
4 Q. When was The Tobacco Institute started? 13:35:58
5 MS. WALBURN: I am going to object to 13:36:00
6 object to counsel's motion. 13:36:04
7 BY MR. LOSS:

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8 Q. What year? 13:36:04
9 A. I don't know. 13:36:04
10 Q. Are you familiar with a cigarette called Premier? 13:36:08
11 A. Yes. 13:36:10
12 Q. What was it? 13:36:10
13 A. It was a nicotine delivery device. It wasn't a 13:36:14
14 cigarette. 13:36:14
15 Q. Did it contain tar? 13:36:16
16 A. It contained tobacco flakes. It was really a 13:36:20
17 nicotine delivery device where glycerol, it had 13:36:26
18 nicotine within the glycerol, there was a heating 13:36:28
19 device on the end of the rod, which was charcoal, 13:36:32
20 finely manufactured, finely tuned with very precise 13:36:36
21 drilled holes in the end of it, charcoal tip, and 13:36:46
22 that heated up the glycerol which vaporized the 13:36:48
23 nicotine which went through the, quote, "tobacco 13:36:50
24 flakes." 13:36:52
25 So if tobacco flakes contain tar, there 13:36:56

1 will be tar in it, but I don't know how much tar 13:36:58
2 actually would have been delivered. Nicotine was 13:37:00
3 the main thing that was delivered. It was a 13:37:02
4 nicotine delivery device. 13:37:04
5 Q. Would you agree that relative to other cigarette 13:37:06
6 products on the market at the time, Premier had 13:37:10
7 virtually no tar? 13:37:12
8 MS. WALBURN: Objection, form and asked 13:37:16
9 and answered. 13:37:16
10 THE WITNESS: Well, the other cigarettes 13:37:18

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11 on the market at the time -- I can't remember the 13:37:20
12 exact time that Premier was introduced by 13:37:26
13 R.J. Reynolds. You are from B.A.T., right? 13:37:32
14 BY MR. LOSS:
15 Q. Are you finished with your answer? Are you finished 13:37:36
16 with your answer? 13:37:36
17 A. No, I am just trying to figure out the question 13:37:38
18 because I thought you told me earlier you were from 13:37:40
19 B.A.T. and we are talking about an R.J.R. product, 13:37:44
20 which is Premier. 13:37:44
21 So in that sense, you are asking questions 13:37:46
22 about another company's product, you know, it kind 13:37:48
23 of leads me to think about, again, the industry as a 13:37:52
24 whole that we started out with. 13:37:54
25 So ask the question again because I got 13:37:56

1 lost in -- 13:37:58
2 Q. I will ask you a different question. 13:38:00
3 A. Okay. 13:38:00
4 Q. Sir, you stated before that you have a package of 13:38:02
5 Next cigarettes and it's a collectors' item, 13:38:04
6 correct? 13:38:04
7 A. I consider it a collectors' item because I can't go 13:38:08
8 to the store and buy any. 13:38:10
9 Q. Would you consider a package of Premier cigarettes a 13:38:12
10 collectors' item? 13:38:14
11 A. I have one of those in the same display case because 13:38:16
12 I can't go to the store and buy them. 13:38:18

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13 Q. So it is a collectors' item? 13:38:20
14 A. Well, to me it's a collector's item. 13:38:22
15 Q. Now, Doctor, would you agree that in terms of 13:38:24
16 consumer acceptability, the ratio of tar to nicotine 13:38:28
17 in cigarettes is a very important factor? 13:38:32
18 MS. WALBURN: Objection, form. 13:38:34
19 THE WITNESS: Well, the industry documents 13:38:36
20 talk about the ratio of tar and nicotine a lot as 13:38:40
21 far as the importance to the consumer, but the real 13:38:44
22 important thing to the consumer is the nicotine 13:38:46
23 delivery. That's what -- that's what is the drug we 13:38:48
24 are talking about. 13:38:50
25 Tar is not a drug of addiction. It's 13:38:52

1 actually one of the substances in cigarette smoke 13:38:54
2 that causes death and disability, but the real 13:38:56
3 problem is the nicotine, which is the drug. 13:39:00
4 BY MR. LOSS:
5 Q. Do you think it's reasonable for tobacco companies 13:39:02
6 to conduct research on modified tar/nicotine 13:39:14
7 ratios? 13:39:14
8 MS. WALBURN: Objection, form. 13:39:18
9 THE WITNESS: It depends upon the 13:39:20
10 outcome -- or it depends on, actually, the objective 13:39:22
11 of the research. 13:39:22
12 If the industry were interested in doing 13:39:24
13 research on tar and nicotine ratio to make a safer 13:39:26
14 product, then that might be of real interest, but 13:39:30
15 all I have seen in here -- not all -- a lot of the 13:39:34

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16 stuff I have seen in the internal documents has to 13:39:36
17 do with lowering the nicotine and tar ratio as it's 13:39:46
18 measured by the Federal Trade Commission machines. 13:39:48
19 And the desire hasn't been -- except 13:39:52
20 actually, there is a couple of documents that say -- 13:39:54
21 one person, in particular, says -- is really chagrin 13:39:58
22 to do this because, actually, people might smoke 13:40:00
23 more with a lower tar, lower nicotine product, and, 13:40:04
24 actually, end up having more health effects. 13:40:06
25 So if the motivation behind doing the 13:40:10

1 research is to do something to make it safer for the 13:40:12
2 consumers, then that would be a good idea. 13:40:14
3 BY MR. LOSS:
4 Q. Have you heard of a cigarette called the Russell 13:40:16
5 cigarette? 13:40:16
6 A. Russell? 13:40:18
7 Q. M.A.H. Russell cigarette. 13:40:20
8 A. M.A.H. Russell as in -- Mike Russell? 13:40:24
9 Q. Yes. 13:40:26
10 A. No, I haven't heard a cigarette named after Mike 13:40:28
11 Russell. 13:40:28
12 Q. Have you read about Mike Russell's theories as to 13:40:32
13 what might constitute a safer cigarette? 13:40:34
14 MS. WALBURN: Objection, form. 13:40:36
15 THE WITNESS: I have heard him speak of 13:40:38
16 that to some degree, but I have not seen anything 13:40:40
17 recently written about that. 13:40:42

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18 BY MR. LOSS:

19 Q. Did Mike Russell propose the manufacture of a 13:40:46

20 low-tar, medium-nicotine cigarette? 13:40:50

21 A. I would have to look back and see. He has talked 13:40:54

22 about higher nicotine delivery cigarettes with the 13:41:00

23 same amount of tar, basically, higher nicotine, I 13:41:04

24 have heard him speak to that issue at conferences, 13:41:06

25 but I would have to go back to the articles you are 13:41:08

1 talking about. 13:41:08

2 I am sure he has had some published on 13:41:10

3 that. In fact, I recall seeing articles he has 13:41:14

4 published, but I couldn't tell you if your statement 13:41:16

5 is contained in one of those articles. 13:41:18

6 Q. Would it be reasonable for tobacco companies to 13:41:20

7 investigate the manufacture of making a low-tar, 13:41:24

8 medium-nicotine cigarette? 13:41:26

9 MS. WALBURN: Objection, form and asked 13:41:30

10 and answered. 13:41:30

11 THE WITNESS: It would be reasonable for 13:41:36

12 the tobacco industry, whose product kills 2 million 13:41:42

13 people worldwide in this year, if they were to make 13:41:46

14 a product that didn't do that, is what would be 13:41:48

15 reasonable. 13:41:52

16 BY MR. LOSS:

17 Q. That didn't do what? 13:41:52

18 A. Kill people, 2 million worldwide. By the year 2015 13:41:58

19 it will be many millions more. 13:42:00

20 So what's reasonable to do would be to 13:42:02

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21 make this safer, truly safer. 13:42:04

22 Q. Do you believe cigarettes should be banned? 13:42:08

23 A. The reality is they are not going to be, so -- 13:42:12

24 Q. No, I am asking -- 13:42:12

25 MS. WALBURN: Excuse me, Counsel, but 13:42:14

1 Dr. Hurt wasn't finished with his answer. 13:42:16

2 BY MR. LOSS:

3 Q. I apologize. Continue. 13:42:18

4 A. What I think about that is that if the question 13:42:22

5 were, would the world be better off where there are 13:42:24

6 no cigarettes, the world would be better off. 13:42:28

7 The reality is the industry has so much 13:42:28

8 money and makes so much money at this that there is 13:42:32

9 not likely to be a ban of them in my lifetime, but 13:42:36

10 if you -- if the question were to be phrased, would 13:42:40

11 the world be better off if we didn't have 2 million 13:42:42

12 people dying this year of tobacco-related diseases, 13:42:46

13 I would say the world would be better off. It would 13:42:48

14 be a better place to live. 13:42:50

15 MR. LOSS: Move to strike as 13:42:52

16 non-responsive. 13:42:54

17 BY MR. LOSS:

18 Q. Do you, personally, as an expert witness in this 13:42:56

19 case, believe that tobacco-containing products such 13:42:58

20 as cigarettes should be banned? 13:43:00

21 MS. WALBURN: Well, I am going to object 13:43:04

22 to the form of the question and, also, asked and 13:43:06

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23 answered. 13:43:06

24 THE WITNESS: The reality is, it's not 13:43:10

25 going to happen, so have -- and be in touch with 13:43:18

1 reality, the facts are if we had no cigarettes in 13:43:20

2 our world today -- well, you all might not be better 13:43:24

3 off because you might have to find another job, but 13:43:28

4 the rest of us in the medical world would be better 13:43:30

5 off if there were no cigarettes. 13:43:32

6 BY MR. LOSS:

7 Q. Do you believe unfiltered cigarettes should be 13:43:34

8 banned? 13:43:34

9 MS. WALBURN: Objection, form. 13:43:38

10 THE WITNESS: I don't know that there is a 13:43:40

11 difference in some of the diseases that occur with 13:43:42

12 filtered versus non-filtered cigarettes. 13:43:46

13 The tobacco products that are currently 13:43:48

14 available cause disease, they cause my patients to 13:43:52

15 continue to use them because of the nicotine 13:43:54

16 addiction, the nicotine they contain, and all the 13:43:56

17 other stuff, the 4,000 plus compounds in them causes 13:44:00

18 their ultimate demise. 13:44:02

19 Whether it's filtered or non-filtered, 13:44:06

20 they are all -- I mean, I used to -- if I really 13:44:08

21 wanted to get a real hit out of a cigarette, I would 13:44:10

22 just tear the filter off and turn it around and 13:44:12

23 smoke it the other way. 13:44:14

24 BY MR. LOSS:

25 Q. What do you mean by "hit"? 13:44:18

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A. What would happen in my brain. 13:44:18
Q. Right. What does that feel like? 13:44:20
A. It's really hard to describe. It is a sensation 13:44:28
of -- there is a euphoria part of the sensation. 13:44:32
The first cigarette of the day is -- there 13:44:34
is some light-headedness with that. It's a very 13:44:38
pleasurable sensation. Maybe some of the memory is 13:44:46
dimmed because it's been so long since I stopped 13:44:48
smoking, but a lot of the memory is still there. My 13:44:54
patients tell me about it and I think the documents 13:44:58
refer to "kick." 13:45:00
Q. Well, what would you compare it to? 13:45:02
A. I don't think I have anything to compare it to. I 13:45:02
have never used cocaine. People who I see that are 13:45:04
cocaine addicts say that the sensation they receive 13:45:08
from smoking cigarettes is on that order of 13:45:08
magnitude, snorting cocaine or doing crack cocaine, 13:45:14
so -- 13:45:14
Q. Are you serious? 13:45:14
A. I am very serious. 13:45:16
Q. So you are telling me you were using a product that 13:45:20
felt like cocaine and yet you were still visiting 13:45:24
patients? 13:45:24
MS. WALBURN: Well, objection, misstates 13:45:26
the testimony. 13:45:28

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1 THE WITNESS: No, no, no. You asked me 13:45:30
2 what I recall it felt like to have the hit I 13:45:34
3 described, and then you asked me to describe what 13:45:38
4 that was like. 13:45:38
5 And I think what I said -- and she can 13:45:42
6 read it back -- was that I don't have any point of 13:45:44
7 reference to know what that feels like because I 13:45:48
8 have never used cocaine, but my cocaine patients who 13:45:52
9 have used cocaine tell me that it is on the same 13:45:56
10 order of magnitude as when they would snort cocaine, 13:46:00
11 comparing the hit they would get from their 13:46:02
12 cigarettes to what they would get from cocaine. 13:46:04
13 MR. LOSS: Well, I move to strike as 13:46:06
14 non-responsive. 13:46:08
15 BY MR. LOSS:
16 Q. I was asking for your personal belief. 13:46:10
17 A. I think you just misunderstood. 13:46:12
18 Q. Let's move on. When a smoker smokes cigarettes, 13:46:14
19 isn't the act of puffing a separate and distinct act 13:46:18
20 from inhaling? 13:46:18
21 MS. WALBURN: Objection, form. 13:46:22
22 THE WITNESS: In order to inhale you have 13:46:32
23 to puff. You have to create a seal. So it's a 13:46:36
24 continuum. 13:46:36
25 BY MR. LOSS:

1 Q. Well, is it physically possible to puff and inhale 13:46:40

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2 simultaneously? 13:46:42
3 A. Never thought about that quite that way. It's a 13:46:54
4 continuum. I think that's the best answer. Most 13:46:58
5 people will draw a cigarette smoke into their mouth 13:47:00
6 at the same time that they are -- I mean, you are 13:47:04
7 talking about things that are very close together as 13:47:06
8 far as time sequence is concerned. It is possible 13:47:10
9 to puff without inhaling, and cigar smokers do that, 13:47:16
10 pipe smokers do -- and some cigarette smokers do 13:47:18
11 that. 13:47:18
12 Q. Is it possible to suck Coca-Cola through a straw and 13:47:22
13 swallow at the same time? 13:47:24
14 MS. WALBURN: Objection. 13:47:26
15 THE WITNESS: Never thought about that, 13:47:32
16 either. 13:47:34
17 BY MR. LOSS:
18 Q. So you don't know? 13:47:36
19 A. Never thought about it. 13:47:36
20 Q. What's the soft palate? 13:47:38
21 A. The soft palate is the part of the mouth that is 13:47:42
22 beyond the hard palate. The soft palate has -- the 13:47:46
23 extension of it is called the uvula, which is the 13:47:48
24 little thing that hangs down in the middle of your 13:47:50
25 throat in the back. 13:47:52

1 Q. Now, before a puff can occur doesn't the smoker have 13:47:54
2 to create a vacuum in his mouth? 13:47:56
3 A. There has to be a pressure change, and it's not a 13:47:58

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4 true vacuum. 13:48:00
5 Q. Well, do you know how that's accomplished, that 13:48:02
6 pressure change? 13:48:02
7 A. Well, it can be accomplished at levels here and up, 13:48:06
8 and the soft palate can be part of that mechanism, 13:48:10
9 part of it can be the tongue, but part of it is the 13:48:12
10 soft palate, part of it can be the closure of the 13:48:16
11 posterior pharynx, which is beyond the soft palate. 13:48:20
12 And it's not a true vacuum. There are 13:48:22
13 very few things that are true vacuums. In fact, 13:48:24
14 there is only one that I know of, one true vacuum, 13:48:36
15 and that's outer space, and some laboratories can 13:48:40
16 produce vacuums that are close to that, but not in 13:48:42
17 the mouth. There is too much stuff that can leak. 13:48:46
18 Q. Would it be fair to say that despite the fact that 13:48:48
19 puffing and inhaling happen close together, they are 13:48:54
20 separate events? 13:48:56
21 MS. WALBURN: Objection, asked and 13:48:58
22 answered. 13:48:58
23 THE WITNESS: They are a continuum of the 13:49:04
24 act of smoking, and when I talk to people who are 13:49:08
25 smokers, I don't think they talk about puff volumes 13:49:14

1 and puffing as a separate action compared to 13:49:18
2 inhaling. 13:49:20
3 I mean, they just don't talk about that. 13:49:22
4 That may be important to your company to figure out 13:49:24
5 what kind of dose of nicotine to put in the 13:49:26
6 cigarette, but my patients are interested in the 13:49:30

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7 nicotine that they can get out of the cigarette, the 13:49:32
8 hit it makes on the brain. 13:49:34
9 BY MR. LOSS:
10 Q. Doctor, can you describe the FTC method for testing 13:49:38
11 cigarette deliveries. 13:49:40
12 A. I think we have addressed that somewhat in the 13:49:44
13 expert report. It is basically a device that takes 13:49:50
14 a cigarette, and through a standard title volume, 13:49:54
15 which can be set at various things, will draw out of 13:49:58
16 that cigarette a certain volume of smoke, and then 13:50:02
17 the smoke is condensed -- or is allowed to condense 13:50:06
18 on a filter, which is then used to separate out the 13:50:10
19 tar or the nicotine and the other stuff, which is 13:50:12
20 more water than anything else. 13:50:14
21 Q. Can you tell me the parameters of a standard FTC 13:50:20
22 test for the deliveries of cigarettes? 13:50:22
23 MS. WALBURN: Objection, form. 13:50:24
24 THE WITNESS: Parameters in what way? 13:50:26
25 BY MR. LOSS:

1 Q. How frequently puffs are taken, the volume of the 13:50:28
2 puff, how far down the cigarette is burned, things 13:50:32
3 of that nature. 13:50:34
4 A. I am assuming that the standards are maybe different 13:50:40
5 this year than they were last year. I don't know 13:50:42
6 that for certain. I do not know all of those 13:50:44
7 parameters, no. 13:50:46
8 Q. So to your knowledge, how many times has the FTC 13:50:56

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9 standard for measuring cigarette deliveries changed 13:50:58
10 since it was instituted? 13:50:58
11 A. I don't know. I don't know that. All I do know is 13:51:04
12 it doesn't make any difference to my patients. They 13:51:08
13 smoke low-tar and low-nicotine cigarettes, which is 13:51:10
14 what the FTC method is all about, and they can 13:51:14
15 extract very large quantities of nicotine from 13:51:16
16 those, quote -- I have got one of my patients who 13:51:18
17 does weird things with the holes. 13:51:22
18 Q. Have you personally ever performed any experiments 13:51:24
19 or laboratory studies on cigarette-smoking behavior 13:51:28
20 relating specifically to compensation? 13:51:34
21 MS. WALBURN: Objection, form. 13:51:36
22 THE WITNESS: I am just trying to 13:51:40
23 remember -- doing a laboratory study related to like 13:51:48
24 looking at FTC measurements or -- 13:51:52
25 BY MR. LOSS:

1 Q. Do you not understand the term "compensation"? 13:51:54
2 A. I understand the term com -- I am trying to 13:51:56
3 understand your question. 13:51:58
4 Q. What does compensation mean? 13:51:58
5 A. Compensation is what I was getting ready to explain 13:52:02
6 to you before you cut me off. That is where people 13:52:04
7 can basically fool the FTC method whereby if there 13:52:08
8 are ventilation holes on the side of the cigarettes 13:52:10
9 or in the filter which allows for more diluted 13:52:16
10 concentration of nicotine and tar in the smoke as 13:52:26
11 measured by the FTC method, then that gives a 13:52:28

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12 certain level. 13:52:30

13 But people don't smoke like that. They 13:52:32

14 compensate for this lower concentration of those 13:52:36

15 products, and mainly nicotine in the smoke, by 13:52:38

16 covering the ventilation holes, inhaling deeper, 13:52:42

17 holding their breath longer and smoking more -- a 13:52:46

18 lot of different things. 13:52:46

19 Q. You said they can fool it up. Can they fool it 13:52:48

20 down, too? 13:52:48

21 A. I think that there have been some studies and 13:52:52

22 actually some references in here about people who, 13:52:54

23 if they have been accustomed to smoking a 13:52:58

24 lower-delivery product are given a higher-delivery 13:53:00

25 product, they may not smoke it as hard, if you will, 13:53:04

1 that's kind of what the term -- they don't smoke it 13:53:06

2 as intensely. 13:53:06

3 Give them a low-tar -- regular-delivery 13:53:10

4 cigarette -- give them a low-tar, low-nicotine 13:53:12

5 cigarette, and they will smoke it more aggressively, 13:53:16

6 then, more intensely. 13:53:16

7 Q. Doctor -- 13:53:18

8 A. I am sorry -- and that's what I understand, that's 13:53:20

9 what your documents say. 13:53:20

10 Q. For now, independent of the documents, I am asking 13:53:24

11 you if you have ever done any compensation 13:53:26

12 studies -- 13:53:28

13 A. Have I done any compensation studies in the 13:53:30

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14 laboratory? No, I have not. 13:53:32

15 Q. Have you written any articles on cigarette smoking 13:53:34

16 behavior relating to compensation? I have looked 13:53:42

17 for them, I didn't find any. 13:53:44

18 A. Yeah, I would have to go back and look -- we have 13:53:46

19 not done any studies looking at that. We do keep 13:53:50

20 track of those people who smoke low-tar, 13:53:52

21 low-nicotine cigarettes. 13:53:54

22 I can't recall if we have ever looked at 13:53:56

23 their nicotine and cotinine levels -- I mean, it's 13:53:58

24 so much a part of our daily life dealing with this 13:54:02

25 issue and talking with -- the patients are always 13:54:04

1 surprised that there are these ventilation holes and 13:54:08

2 that low-tar and low-nicotine delivery products do 13:54:10

3 not really mean that. 13:54:10

4 And, in fact, most of them are pretty 13:54:12

5 angry that they have been tricked by that 13:54:16

6 methodology and have this be perceived as a safer 13:54:18

7 product, and most smokers don't really know that. 13:54:22

8 Q. I take it you haven't written any articles or 13:54:26

9 performed any studies on nicotine titration as well? 13:54:30

10 A. "Nicotine titration" meaning what? 13:54:32

11 Q. Well, you tell me -- 13:54:32

12 A. What does nicotine titration mean to you? 13:54:34

13 A. It depends on the context. 13:54:36

14 Q. I want to know your definition. 13:54:38

15 A. When I think about nicotine titration, I think about 13:54:40

16 treating patients for their nicotine addiction, and 13:54:44

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17 that means titrating the dose of our replacement 13:54:48
18 product up to meet the dose that they have been 13:54:50
19 receiving from the cigarette. We call that 13:54:54
20 titration in that sense because we are titrating the 13:54:58
21 dose up to meet the level that they were receiving 13:55:00
22 previously. Another term for it would be 13:55:04
23 replacement. 13:55:04
24 So I am not sure what you mean by 13:55:06
25 titration. That's one of the studies we have done 13:55:08

1 that has to do with matching up the dose level with 13:55:10
2 what they had been receiving. 13:55:12
3 Q. Well, have you read in the outside literature about 13:55:14
4 the titration hypothesis? 13:55:16
5 MS. WALBURN: Objection, form -- 13:55:18
6 THE WITNESS: I remember seeing about 13:55:20
7 that, but you would have to show me something to 13:55:22
8 refresh my -- 13:55:22
9 BY MR. LOSS:
10 Q. Well, I am taking it from your document, sir. I 13:55:26
11 think it's previously been marked, Jack 13:55:28
12 Henningfield, Nicotine Dependence. Has it been 13:55:30
13 marked? 13:55:32
14 A. Which one? 13:55:32
15 Q. Has that one been marked? If not, let's mark it -- 13:55:40
16 A. You say this is my document -- 13:55:46
17 Q. It's already been marked, I am told. You are 13:55:50
18 welcome to look at another copy, though. Yes, it's 13:55:54

http://legacy.library.ucsf.edu/tid/uqm35a00/pdf Source: https://www.industrydocuments.ucsf.edu/docs/rzhd0001

19 one of your sources, sir. 13:55:58

20 A. Well, let's see if it's been marked. I don't have 13:56:00

21 it in my pile here, and I have got all of -- well, I 13:56:06

22 may have it over here. 13:56:06

23 Q. This is Exhibit 2468. Doctor, is this one of the 13:56:20

24 articles -- 13:56:20

25 A. I don't know -- 13:56:22

1 Q. I have handed it to you. 13:56:24

2 A. I have got it here but I am still trying to find it 13:56:26

3 in the marked section. 13:56:26

4 Q. There is no reason for that. 13:56:32

5 A. I would just like to know if I have ever seen it 13:56:32

6 before.

7 Q. Well, it's right there in front of you, sir. Is 13:56:32

8 this one of the documents you reviewed or one of the 13:56:38

9 documents you read? 13:56:40

10 MS. WALBURN: Objection, form, and, also, 13:56:42

11 let's wait until the -- 13:56:42

12 THE WITNESS: Yeah, here it is. I just 13:56:44

13 remembered this being the first page of it, so this 13:56:46

14 isn't the complete one that was marked. 13:56:46

15 BY MR. LOSS:

16 Q. What's missing, sir, just the -- 13:56:48

17 A. The front page. 13:56:50

18 Q. And what's on the front page? 13:56:50

19 A. It's the Table of Contents, but you identify things 13:56:54

20 by what you remember seeing, and I just couldn't 13:56:56

21 remember seeing this in that way. So I reviewed 13:56:58

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22 this in the course of my preparation for all this. 13:57:02

23 Q. Right. So I want you to turn to page 46 S, and I 13:57:16

24 want to know what you -- whether or not you agree or 13:57:18

25 disagree with the following paragraph, and I will 13:57:22

1 stop after every sentence so you can comment, agree 13:57:24

2 or disagree. 13:57:26

3 MS. WALBURN: Well, I am going to object 13:57:28

4 to the form of that question. 13:57:30

5 BY MR. LOSS:

6 Q. That's fine. We are reading from the left-hand 13:57:32

7 column. 13:57:32

8 A. I wanted to read the rest of it in order to be able 13:57:34

9 to understand your question. I need to read the 13:57:36

10 context of which this is in. So which paragraph -- 13:57:38

11 Q. Have you not read this before? 13:57:40

12 MS. WALBURN: Objection, asked and 13:57:40

13 answered. 13:57:42

14 THE WITNESS: I have read it before, I 13:57:44

15 reviewed it, and review, as I explained earlier, 13:57:44

16 meant that I reviewed it but it could have been a 13:57:48

17 long time ago, so I didn't know that you or your 13:57:52

18 predecessor were going to ask questions about this. 13:57:56

19 Had I known that, I would have probably reviewed it 13:57:58

20 last night. 13:57:58

21 BY MR. LOSS:

22 Q. Well, let's see what you know. In the left-hand 13:58:00

23 column, the last full paragraph, quote, "The 13:58:04

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24 boundary model, however, does not postulate that 13:58:06

25 there is a" -- 13:58:08

1 A. 46 S? 13:58:10

2 Q. Yes, sir. Left-hand column, last full paragraph. 13:58:16

3 A. "Theoretical issues"? 13:58:18

4 Q. "The boundary model." 13:58:20

5 A. "The boundary model." Okay. I got you. 13:58:22

6 Q. "The boundary model, however, does not postulate 13:58:24

7 that there is a specific nicotine plasma level that 13:58:26

8 is desired by a smoker, who will carefully adjust 13:58:30

9 his nicotine intake to maintain that level. This is 13:58:34

10 the premise of the `nicotine titration theory' and 13:58:36

11 the source of considerable debate." 13:58:40

12 Do you agree or disagree with those two 13:58:42

13 sentences, or do you have no opinion? 13:58:50

14 A. Well, the nicotine titration theory is a source of 13:58:52

15 debate and it continues to be that way even to the 13:58:56

16 point that I was raising earlier about nicotine 13:58:58

17 replacement therapy. Some people think that you 13:59:00

18 don't have to completely replace in order to help 13:59:02

19 people stop smoking, so it fits into the same 13:59:04

20 scheme. 13:59:06

21 Q. Let's keep going. "One of the problems with the 13:59:08

22 theory is that nicotine regulation or titration is 13:59:10

23 postulated as a controlling variable in its own 13:59:14

24 right and not simply as a descriptive construct to 13:59:16

25 summarize the average data. 13:59:18

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"Moreover, the possibility that 13:59:20
individual tobacco users carefully regulate their 13:59:22
intake, (i.e., `titrate') to provide constant plasma 13:59:26
nicotine levels within the day has never been 13:59:28
convincingly demonstrated." 13:59:32
Do you agree or disagree with those two 13:59:34
sentences? 13:59:34
A. I would say that there are limitations to what the 13:59:42
authors had access to because these documents speak 13:59:46
to the threshold effect. They speak to the issue of 13:59:50
titration, if you will, if you want to call it that 13:59:54
way. I have forgotten what they talk about. They 13:59:56
talk about reaching the right dose to assure 13:59:58
satisfaction. 14:00:00
There are many documents that I reviewed 14:00:02
that have to do with this, so though there may not 14:00:06
be, in these authors' terms, evidence in the 14:00:10
scientific literature, I don't know that they have 14:00:14
had access to what I have seen, and there is a large 14:00:18
theme of that throughout these documents that talk 14:00:20
about the right dose level to continue the behavior, 14:00:26
to continue the addiction, to the point of how low 14:00:30
can we go, was one I remember from yesterday. 14:00:32
So though -- though this may be a correct 14:00:38
as is stated, I think they are missing a lot of 14:00:40

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1 information that your company wouldn't allow the 14:00:42
2 rest of us to see. 14:00:44
3 Q. Doctor, how did you perform your literature search 14:00:46
4 in order to obtain your information on compensation 14:00:54
5 that appears in your expert report? 14:00:58
6 MS. WALBURN: Objection, form. 14:01:00
7 THE WITNESS: What is included in my 14:01:04
8 expert report has to do with my experience, my 14:01:08
9 knowledge, my own files of articles that I have 14:01:10
10 accumulated over the years, and does not necessarily 14:01:18
11 include a literature search on each one of those 14:01:20
12 points. 14:01:24
13 I can't remember if I did a literature 14:01:26
14 search on compensation or not, but the material has 14:01:32
15 to do with what I do for a living and so it's -- it, 14:01:36
16 in and of itself, is kind of on a continuum, as 14:01:40
17 well, because as articles come across my desk, I 14:01:42
18 might read them, file them away, and so on. 14:01:44
19 And so it was not a formal -- I am going 14:01:48
20 to take this point and I am going to go do a lit 14:01:52
21 search on everything that's ever been written, 14:01:54
22 because I know a lot about this already, and my 14:01:58
23 training, my patients, what we do in research, 14:02:00
24 allows me to understand those things. 14:02:06
25 BY MR. LOSS:

1 Q. How many articles do you think are out there in the 14:02:10
2 public literature on compensation, titration and 14:02:14

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3 regulation with respect to nicotine or smoking? 14:02:18

4 MS. WALBURN: Objection, form. 14:02:20

5 THE WITNESS: Well, I mean, there is -- 14:02:22

6 you have kind of got three different things in 14:02:24

7 there, and I -- compensation, titration, nicotine 14:02:28

8 regulation. As far as how many are out there, I 14:02:34

9 haven't done a search to try to do that. 14:02:36

10 What I do know is that there seems to be a 14:02:38

11 lot more just in the limited number of documents 14:02:40

12 that I reviewed from the internal tobacco industry 14:02:42

13 documents that have to do with that than anything I 14:02:46

14 recall seeing in the scientific literature. 14:02:48

15 BY MR. LOSS:

16 Q. I thought you said you didn't do a search. 14:02:50

17 A. A what? 14:02:50

18 MS. WALBURN: Objection. 14:02:52

19 THE WITNESS: Anything that I have seen in 14:02:52

20 the scientific literature means what I do on a daily 14:02:56

21 basis. 14:02:56

22 BY MR. LOSS:

23 Q. I see. So you have not compared the tobacco 14:02:58

24 documents that you have reviewed with the outside 14:03:00

25 literature? 14:03:00

1 MS. WALBURN: Objection, misstates the 14:03:04

2 testimony and asked and answered on multiple 14:03:04

3 occasions now, Counsel. 14:03:06

4 THE WITNESS: Yeah, and I think we went 14:03:08

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5 over this earlier. I have not done a side-by-side 14:03:10
6 comparison. Remember that I only have a limited 14:03:12
7 number of the documents. I haven't gone through all 14:03:14
8 the documents. I would love to do that comparison. 14:03:16
9 If you will furnish me all the documents, we will 14:03:26
10 write a Noon & Drool (ph) medical article comparing
11 the outside literature -- 14:03:28
12 Q. We already did. 14:03:30
13 A. You what?
14 Q. We already furnished them. 14:03:30
15 A. You did? Good. 14:03:32
16 MS. WALBURN: Objection, misstates the 14:03:34
17 record. 14:03:38
18 BY MR. LOSS:
19 Q. Doctor, in your opinion who are the leading experts 14:03:40
20 in the field of smoking compensation research? 14:03:44
21 MS. WALBURN: Objection, form. 14:03:46
22 THE WITNESS: Well, several names come to 14:03:50
23 mind. I don't know if there is any one single 14:03:52
24 person. 14:03:54
25 BY MR. LOSS:

1 Q. Give me three. 14:03:56
2 MS. WALBURN: Objection, form. 14:03:58
3 THE WITNESS: Lynn Koslowski (ph) would be 14:04:08
4 one, Jack Henningfield would be one, Neil Benowitz 14:04:14
5 would be one. I am -- I need to see a more 14:04:18
6 comprehensive list. Those are ones that come to 14:04:22
7 mind. 14:04:22

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8 BY MR. LOSS:

9 Q. All right, Doctor, I am going to read you a 14:04:26

10 definition of compensatory smoking, and again, I 14:04:28

11 would like to know whether or not you agree or 14:04:30

12 disagree, and feel free to take it apart if you 14:04:32

13 want. 14:04:34

14 "Compensatory smoking has been defined as 14:04:36

15 the control of the intake of one or more smoking 14:04:40

16 components by a change in one's smoking pattern so 14:04:42

17 that similar intakes are achieved from cigarettes 14:04:46

18 with dissimilar machine smoke deliveries." 14:04:50

19 MS. WALBURN: Object to the form of the 14:04:54

20 question. Do you have a citation for that, 14:04:56

21 Counsel? 14:04:56

22 MR. LOSS: No, I don't. 14:04:56

23 MS. WALBURN: So it's not coming from 14:04:58

24 anything? 14:05:00

25 MR. LOSS: It's coming from my outline. 14:05:00

1 THE WITNESS: I need to see it before I -- 14:05:02

2 I mean, that's a lot of words. 14:05:04

3 MR. LOSS: Could you restate the question 14:05:06

4 for the doctor? 14:05:06

5 THE WITNESS: Is there a document that 14:05:12

6 that refers to? Is that an article written by 14:05:14

7 somebody? 14:05:14

8 MR. LOSS: Could you reread the question, 14:05:16

9 please. 14:05:18

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10 (The record was read by the court
11 reporter.)
12 MS. WALBURN: I am going to object to 14:05:56
13 proceeding in this fashion without -- 14:05:58
14 THE WITNESS: I can't answer that until I 14:06:00
15 see -- I can't answer until I take a look at it. 14:06:02
16 MR. DARLING: Maybe the witness has been 14:06:06
17 allowed to look at the realtime transcript so if he 14:06:08
18 can see it. 14:06:10
19 MR. LOSS: It's fine with me. 14:06:10
20 MS. WALBURN: I appreciate your help but 14:06:12
21 it came up garbled on the realtime, and if there is 14:06:16
22 a source for that, we are entitled to see it. 14:06:18
23 THE WITNESS: Yeah, I would like to see a 14:06:20
24 source. You have given me Henningfield and so on, 14:06:22
25 and so I just want to know who you are quoting and 14:06:26

1 what it's about. I mean, that's not unreasonable, 14:06:26
2 is it? 14:06:28
3 BY MR. LOSS:
4 Q. Do you agree or disagree with that definition? 14:06:30
5 MS. WALBURN: Objection, asked and 14:06:32
6 answered.
7 THE WITNESS: I can't remember what 14:06:32
8 the -- what the definition you read and she read 14:06:34
9 even faster than I talk. That was pretty fast. She 14:06:40
10 did it pretty quick. 14:06:42
11 BY MR. LOSS:
12 Q. How long has compensation been common knowledge in 14:06:44

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13 the public literature? 14:06:46

14 MS. WALBURN: Objection, form. 14:06:48

15 THE WITNESS: Common knowledge is, I 14:06:50

16 think, the key part to your question. 14:06:54

17 BY MR. LOSS:

18 Q. I will withdraw the question. 14:06:56

19 A. And, in fact, it isn't common knowledge even today 14:07:00

20 amongst the people who use your product at all. 14:07:02

21 Q. Excuse me. Amongst scientists, how long has the 14:07:08

22 compensation phenomenon been in the public 14:07:10

23 literature? 14:07:10

24 MS. WALBURN: Objection, form. 14:07:12

25 THE WITNESS: And I would answer it the 14:07:14

1 same way as far as citations from the literature may 14:07:18

2 go back 15 years or so, or I am not exactly sure how 14:07:22

3 far. 14:07:22

4 I would have to go back and look at my 14:07:24

5 report as well as these documents, but the common 14:07:26

6 knowledge about this being a factor is not widely 14:07:30

7 understood within the scientific community, meaning 14:07:32

8 the community of physicians and surgeons who take 14:07:34

9 care of patients. 14:07:36

10 They are clueless as to this as a 14:07:40

11 phenomenon, and the patients are even more 14:07:42

12 clueless. They don't have the foggiest notion that 14:07:46

13 ventilation holes exist. When you hold one up and 14:07:48

14 show the patient, they'll say "They did what, they 14:07:52

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15 put these little holes in there?" 14:07:54

16 So common knowledge really is the key 14:07:56

17 issue here as it relates to what I do on a daily 14:07:58

18 basis, which is try to help people stop smoking. 14:08:00

19 BY MR. LOSS:

20 Q. So are you saying that compensation is a 14:08:02

21 subconscious behavior? 14:08:04

22 A. In some people, compensation is a conscious 14:08:10

23 behavior. In others, they don't realize they are 14:08:14

24 doing it at all. 14:08:14

25 As I started to tell you earlier, that I 14:08:16

1 had one patient who gets her low-tar, low-nicotine 14:08:18

2 cigarettes out every day and she wraps cellophane 14:08:22

3 tape around the holes. She knows that, that if she 14:08:24

4 does that she gets higher levels of nicotine than 14:08:26

5 what she would have gotten. 14:08:28

6 Other people who compensate do not realize 14:08:30

7 that they take deeper breaths, they hold their 14:08:32

8 breath longer, and so on. They don't know that at 14:08:36

9 all. And so some don't know that when they put 14:08:38

10 their fingers on a certain part of the cigarette, 14:08:40

11 that they might be covering up the ventilation 14:08:42

12 holes, no, that's not common knowledge. 14:08:46

13 Q. So do I understand that you warn these people who 14:08:50

14 compensate subconsciously not to compensate? 14:08:54

15 MS. WALBURN: Objection, form. 14:08:56

16 THE WITNESS: No. What we do is try to 14:08:58

17 inform them of what -- what they are doing. It's 14:09:02

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18 like having an alcoholic in front of you, and what 14:09:06
19 you would suggest would be, well, let's just have 14:09:10
20 them drink wine or beer because it's lower 14:09:12
21 concentration. We don't tell them to do that, 14:09:14
22 either. 14:09:14
23 So what we try to do is inform the patient 14:09:16
24 about what they are doing. They think that they are 14:09:18
25 smoking a safer product, and the reality is they are 14:09:22

1 not. 14:09:22
2 And when they find that out, they 14:09:24
3 generally aren't happy with it because they have 14:09:26
4 been led to believe that low tar and nicotine -- low 14:09:28
5 nicotine means this is better for me, this is a, 14:09:32
6 quote, "health reassurance," to use your company's 14:09:34
7 terms, a health reassurance product that may not 14:09:38
8 cause lung cancer, may not cause heart disease, may 14:09:42
9 not cause these other things. 14:09:42
10 So that's what I tell patients, to answer 14:09:44
11 your question. 14:09:46
12 BY MR. LOSS:
13 Q. Now, nicotine titration relates to the equilibrium 14:09:52
14 of nicotine in the bloodstream, correct? 14:09:54
15 A. We have kind of talked about this earlier and I 14:09:56
16 would have to go back and look at this document to 14:09:58
17 see the context in which -- 14:10:00
18 Q. Well, do you know off the top of your head? 14:10:04
19 MS. WALBURN: I am going to object to the 14:10:06

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20 form of the question. There has already been 14:10:08
21 testimony that titration can mean different things. 14:10:12
22 THE WITNESS: And as I think I told you 14:10:16
23 earlier, in the context of treating patients, the 14:10:18
24 titration has to do with titrating the dose of the 14:10:22
25 replacement up to the dose that they have been 14:10:24

1 receiving, and the context mentioned in the 14:10:26
2 Henningfield article has to do with whether or not a 14:10:30
3 person will smoke up to a certain level that has to 14:10:34
4 do with the level in their brains, and your internal 14:10:38
5 documents speak to that a lot. 14:10:40
6 They talk about people smoking up to a 14:10:42
7 certain level. I am not sure that they use in the 14:10:44
8 documents the term "nicotine titration" but they 14:10:46
9 sure talk about the dose needed to satisfy the 14:10:50
10 individual and making sure the dose is correct and 14:10:54
11 that that is what continues the smoking behavior in 14:10:56
12 these subjects. 14:10:58
13 BY MR. LOSS:
14 Q. So as you use the term "titration," it's a synonym 14:11:00
15 for compensation, correct? 14:11:02
16 A. No, I didn't say that at all. 14:11:06
17 Q. Well, what's the difference between compensation and 14:11:08
18 titration, in your opinion? 14:11:08
19 A. Compensation is when a person is smoking something 14:11:16
20 that was designed to give a lower reading from the 14:11:20
21 FTC method in the FTC machines designed purposely to 14:11:26
22 do that. 14:11:26

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23 And furthermore, knowingly by the 14:11:30
24 companies, that people would compensate -- and maybe 14:11:34
25 the word "compensation" came from the companies to 14:11:36

1 begin with, that people would smoke these 14:11:38
2 differently. They would inhale deeper -- bigger 14:11:42
3 puff volume, inhale deeper, hold their breath 14:11:46
4 longer, and so on, is what I mean when I talk about 14:11:50
5 compensation. 14:11:50
6 In an individual they will do things to 14:11:52
7 the cigarette to allow them to extract more nicotine 14:11:56
8 than would be ordinarily thought to come out using 14:12:00
9 the FTC method. 14:12:00
10 Q. Well, Doctor, with respect to the subject areas we 14:12:08
11 have been discussing -- 14:12:08
12 A. With respect to what? 14:12:10
13 Q. The subject areas we have been discussing, 14:12:12
14 specifically what did the tobacco -- what did the 14:12:16
15 tobacco companies do wrong? 14:12:18
16 MS. WALBURN: Objection, form. Vague. 14:12:22
17 THE WITNESS: I mean what subjects, which 14:12:24
18 ones? 14:12:26
19 BY MR. LOSS:
20 Q. Compensation and titration. 14:12:28
21 A. What they did right was they made it possible to use 14:12:38
22 those techniques to continue to have people use 14:12:42
23 their product, and that's really the bottom line. 14:12:48
24 That's what they did right. 14:12:50

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25 Q. What did they do wrong? 14:12:52

1 MS. WALBURN: Objection, form. 14:12:54

2 THE WITNESS: Wrong with what? In what 14:12:58

3 respect? With low-tar, low-nicotine cigarettes, is 14:13:02

4 that what you mean? 14:13:04

5 BY MR. LOSS:

6 Q. I am asking you. You are the expert. 14:13:06

7 A. But I am asking you what you mean by your question. 14:13:08

8 You said of the topics we have been discussing, 14:13:10

9 compensation, da, da, da, da, da, which one and in 14:13:12

10 what context? I mean, is it compensation that you 14:13:16

11 are asking about, what they did wrong? 14:13:18

12 Q. Yes. 14:13:18

13 A. Is that it? 14:13:20

14 Q. Yes. 14:13:20

15 A. What they really did wrong was to know that they 14:13:26

16 were producing a product that was a health 14:13:32

17 reassurance product and advertising it that way to 14:13:38

18 lead the public to think that they were smoking 14:13:42

19 something that was safer. 14:13:44

20 That, to me, is a misrepresentation of 14:13:46

21 what they said internally. What they said publicly 14:13:52

22 does not match up with what they talked about 14:13:54

23 internally. They didn't -- you don't see an 14:13:58

24 advertisement for a low-tar and low-nicotine 14:14:00

25 cigarette saying this is your health reassurance 14:14:04

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product. 14:14:04

It doesn't have to say that because it's 14:14:06

labeled as being a low-tar, low-nicotine product, 14:14:10

and the way it's displayed and the context it's used 14:14:12

in the advertising leads the person to believe that 14:14:14

it really is. 14:14:16

And that's what they did wrong. They just 14:14:18

weren't up front about what they were doing and what 14:14:22

they knew and when they knew it. 14:14:24

Q. I understand that you read in a document about 14:14:26

health reassurance. 14:14:28

A. I didn't read in one document about health 14:14:30

reassurance, I read in several. The recurring theme 14:14:34

in these documents is that theme. 14:14:36

Q. Doctor, you shouldn't interrupt my questions. I 14:14:38

won't interrupt your answers. I wasn't done with my 14:14:40

question. 14:14:42

MS. WALBURN: Well, it sounded like you 14:14:44

were.

BY MR. LOSS:

Q. There is no question pending and I would ask you to 14:14:46

give me the same courtesy I am trying to give you. 14:14:48

A. Fair enough. 14:14:48

Q. Now, I understand you read in a document, or several 14:14:52

documents, about health reassurance, and what I am 14:14:54

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1 asking you is: How did the tobacco companies 14:14:58
2 communicate this health reassurance to consumers? 14:15:02
3 MS. WALBURN: Objection, asked and 14:15:04
4 answered. 14:15:04
5 THE WITNESS: They communicated in a way 14:15:08
6 that made the consumers think that the products were 14:15:12
7 safer and that was wrong. 14:15:18
8 BY MR. LOSS:
9 Q. How? 14:15:18
10 A. Because they weren't safer, and furthermore, the 14:15:22
11 companies knew that they weren't safer. 14:15:24
12 Furthermore, they labeled something as being low 14:15:28
13 tar, low nicotine, which leads the person to 14:15:32
14 believe, that's buying the product, that, well, 14:15:34
15 maybe it's lower in tar, that's good, but lower in 14:15:36
16 nicotine, that's good, too. 14:15:38
17 And they knew about compensation. They 14:15:42
18 knew more about compensation than anyone in the 14:15:44
19 world. They invented it. 14:15:46
20 Q. Doctor, what did B.A.T. Co. say to the public that 14:15:50
21 was health reassurance? 14:15:50
22 MS. WALBURN: Objection, form, asked and 14:15:54
23 answered. 14:15:54
24 THE WITNESS: B.A.T. is a part of the 14:15:56
25 tobacco industry. It has its very roots in the 14:16:00

1 tobacco industry as it has evolved historically, and 14:16:04
2 the tobacco industry, through its spokespeople, 14:16:10
3 whoever they are, through the Tobacco Institute and 14:16:12

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4 through all other forms of advertisement and 14:16:16
5 promotion, has been doing the same thing. 14:16:18
6 It's not -- this is not just one company, 14:16:20
7 it's not B.A.T., it's not Brown & Williamson, it's 14:16:24
8 not Philip Morris, it's not R.J.R., it's all of you 14:16:28
9 have been done the same things, some to a better and 14:16:30
10 different degree than others. 14:16:32
11 From your perspective of being able to 14:16:34
12 sell more of your particular brand, from my 14:16:36
13 perspective, the epidemic continues, and it 14:16:40
14 continues because the companies and their supporters 14:16:44
15 have been deceptive to the public. 14:16:46
16 They have promoted a product that they 14:16:50
17 know causes death, disability, addiction, and they 14:16:54
18 have done it in a way that gives reassurance to the 14:16:58
19 public that it's not going to do that. 14:17:02
20 BY MR. LOSS:
21 Q. You mentioned advertisements and promotions. Is 14:17:06
22 there anything else that British American Tobacco 14:17:08
23 did, according to you, that constitutes health 14:17:10
24 reassurance to the public? 14:17:12
25 MS. WALBURN: Objection, misstates the 14:17:14

1 prior testimony and asked and answered now several 14:17:18
2 times. 14:17:18
3 THE WITNESS: The tobacco industry as a 14:17:20
4 group have been doing this for decades. The health 14:17:26
5 reassurance issue -- if you want, I can sit here and 14:17:28

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6 go through and see what B.A.T. said, what 14:17:30
7 Brown & Williamson said, and what they said about, 14:17:36
8 quote, "health reassurance." 14:17:38
9 I don't know for sure that I could cite 14:17:40
10 you one, but it doesn't make any difference because 14:17:42
11 you are all in the same boat. 14:17:46
12 BY MR. LOSS:
13 Q. Doctor, have you reviewed any advertisements when 14:17:48
14 you prepared your expert report? I didn't see any 14:17:54
15 referenced. 14:17:54
16 A. I see advertisements every day. I can't help but 14:17:58
17 see advertisements every day. I went to London, I 14:18:00
18 saw your company's advertisements in London. I go 14:18:04
19 to Scotland, I see your advertisements in Scotland. 14:18:06
20 I cannot escape advertisements 14:18:08
21 promoting -- I can't pick up a Sports Illustrated 14:18:12
22 and put the back page face up without seeing one of 14:18:16
23 your advertisements. It is pervasive. 14:18:18
24 If you spent as much money on helping to 14:18:20
25 develop a safer cigarette as your marketing 14:18:22

1 department spends on marketing to our children, then 14:18:28
2 talk to me about safety and health reassurance. 14:18:32
3 Q. Doctor, has a tobacco company ever told the public 14:18:36
4 that cigarette smoking was safe? 14:18:40
5 MS. WALBURN: Objection, form. 14:18:40
6 THE WITNESS: The tobacco company, through 14:18:42
7 the way that they displayed their messages, low tar, 14:18:46
8 low nicotine, is what they say publicly. 14:18:50

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9 What they say privately is we need to 14:18:52
10 figure out a way to display our product to provide 14:18:56
11 health reassurance for the people concerned about 14:18:58
12 health, and if you talk to smokers, most smokers are 14:19:00
13 concerned about their health. 14:19:04
14 The corollary to that would be, has the 14:19:08
15 tobacco companies ever said that cigarette smoking 14:19:12
16 causes emphysema or lung cancer? 14:19:14
17 I don't think I recall them doing that, 14:19:14
18 and furthermore, I don't recall any of the 14:19:16
19 executives that were before congress in 1994 saying 14:19:20
20 that nicotine was addicting, either, but their 14:19:22
21 internal documents say that they knew this 30 years 14:19:24
22 ago, that nicotine was addicting, so what you say 14:19:28
23 publicly has to do with your public relations, and 14:19:30
24 what you say privately has to do with what you know 14:19:34
25 and when you knew it. 14:19:36

1 BY MR. LOSS:
2 Q. Right, and I want to know what misrepresentations 14:19:38
3 were made to the public regarding health 14:19:40
4 reassurance. 14:19:42
5 MS. WALBURN: Objection, asked and 14:19:44
6 answered now on numerous occasions. 14:19:44
7 THE WITNESS: What I said is that the 14:19:48
8 low-tar, low-nicotine cigarettes are just that. My 14:19:52
9 patients tell me that, that they are smoking those. 14:19:56
10 Why do you smoke these cigarettes? Well, I thought 14:20:00

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11 they would be safer for me to smoke. Why did you 14:20:02
12 think that? Well, because they are lower in tar and 14:20:04
13 lower in nicotine. 14:20:06
14 I mean, the advertisements say that. 14:20:08
15 There is one advertisement that says lowest in tar 14:20:10
16 and lowest in nicotine, and then it has that brand 14:20:14
17 with all the other brands underneath it. 14:20:16
18 I mean, it's just the common knowledge 14:20:18
19 amongst people is that this is probably safer. 14:20:22
20 Otherwise, if it weren't safer, wouldn't somebody do 14:20:26
21 something about that. 14:20:28
22 BY MR. LOSS:
23 Q. But the ads don't say that, do they? 14:20:30
24 MS. WALBURN: Objection, form, misstates 14:20:32
25 the testimony and -- 14:20:32

1 MR. LOSS: It's a question. 14:20:34
2 MS. WALBURN: Excuse me. I wasn't done 14:20:36
3 making my objection -- and asked and answered now on 14:20:38
4 numerous occasions and I would caution counsel to 14:20:42
5 move on. 14:20:42
6 BY MR. LOSS:
7 Q. Doctor, will you be testifying as an advertising and 14:20:44
8 marketing expert in this case? 14:20:46
9 A. Only to the extent that it comes into play with what 14:20:52
10 I do on a daily basis and how I refer to and relate 14:20:56
11 to patients. I do have one of the members -- one of 14:21:00
12 the expert people has to do with marketing and 14:21:04
13 advertising, so that will not be my particular area 14:21:08

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14 of expertise. 14:21:08

15 Q. Is it your contention that the introduction of 14:21:10

16 low-tar products was just a ploy by the tobacco 14:21:14

17 industry to offer smokers health reassurance? 14:21:18

18 MS. WALBURN: Objection, form. 14:21:20

19 THE WITNESS: I think it was in part 14:21:26

20 response -- in part in response to what was 14:21:30

21 beginning to become common knowledge amongst the 14:21:34

22 scientific community that cigarette smoking caused 14:21:36

23 lung cancer, heart disease, and emphysema, and I 14:21:40

24 think that it was in response to that to try to 14:21:42

25 figure out a way to overcome those health concerns. 14:21:48

1 So I think that's the origin of it, 14:21:50

2 because those things happened in the '50s and '60s, 14:21:54

3 and the first thing that happened, of course, was 14:21:56

4 putting filters on them. Putting filters on a 14:21:58

5 cigarette was kind of the first move to a, quote, 14:22:00

6 "health reassurance" sort of mode. When the 14:22:06

7 low-tar, low-nicotine cigarette technology was 14:22:08

8 invented or introduced, if you will, that fed into 14:22:12

9 it. 14:22:12

10 I think it was in response to the concerns 14:22:16

11 being expressed by the public health community. 14:22:20

12 BY MR. LOSS:

13 Q. And that would include the National Cancer 14:22:22

14 Institute?

15 A. That's part of the public health community. 14:22:26

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16 Q. Would it include Ernst Winder? 14:22:28
17 A. Ernst Winder. It's late in the day. I can't tell 14:22:34
18 you the name. 14:22:36
19 Q. Would it include the surgeon generals of the 14:22:38
20 United States? 14:22:38
21 MS. WALBURN: Objection, form. 14:22:40
22 THE WITNESS: The public health 14:22:40
23 community? 14:22:42
24 BY MR. LOSS:
25 Q. Yeah. 14:22:42

1 A. They are part of the public health community, or at 14:22:44
2 least they were, if they are no longer the surgeons 14:22:50
3 general. They have been -- that's kind of the 14:22:52
4 overall picture of the public health community. 14:22:54
5 Q. Can you name any public health authority that 14:22:58
6 recommended not lowering tar? 14:23:02
7 MS. WALBURN: Objection, form. 14:23:02
8 THE WITNESS: I think there is a 14:23:04
9 difference in lowering tar and fooling the 14:23:10
10 machines -- or fooling the people by having the 14:23:12
11 machines give a reading that's lower in tar. That's 14:23:16
12 what we are talking about. 14:23:16
13 We are not -- I think everyone was 14:23:18
14 concerned about -- and, in fact, the internal 14:23:22
15 documents say that some of your own people were 14:23:24
16 chagrined that they would continue to be producing 14:23:26
17 cigarettes that had these levels of tar, and they 14:23:30
18 knew that if you put the residue of the cigarettes 14:23:32

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19 on the backs of mice it would cause cancer, they 14:23:34
20 were concerned internally about the safety of the 14:23:38
21 product, and my perception after reading the whole 14:23:40
22 set that I have read was that those lone voices were 14:23:42
23 kind of quieted. For what reason, I am not sure. 14:23:50
24 So had the industry produced a safer 14:23:54
25 cigarette, which they have the capability of 14:23:58

1 doing -- 14:24:04
2 BY MR. LOSS:
3 Q. Are you finished? 14:24:04
4 A. -- had they done that, then that would have been in 14:24:08
5 response to the public health community's cry for a 14:24:10
6 safer cigarette. 14:24:10
7 Q. Doctor, I thought you said yesterday that it's not 14:24:20
8 possible to make a safer cigarette. 14:24:20
9 MS. WALBURN: Objection, misstates the 14:24:22
10 testimony. 14:24:22
11 THE WITNESS: I think what I said, we'd 14:24:24
12 have to go back and look, was that there is no such 14:24:26
13 thing as a safe cigarette that we have. I haven't 14:24:30
14 seen a safe cigarette. 14:24:32
15 BY MR. LOSS:
16 Q. Well, what is the technology that you claim the 14:24:34
17 tobacco industry has that would produce a safe 14:24:36
18 cigarette? I am sorry, excuse me. Go ahead. 14:24:54
19 A. You just named one, the Premier. I mean, no one has 14:24:58
20 ever tested that out to see if that would actually 14:25:02

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21 be safer in the long-term or not because it hasn't 14:25:04
22 been tested that long, but it certainly avoids the 14:25:08
23 large number of things that are produced when the 14:25:10
24 tobacco, in whatever form it's reconstituted in 14:25:12
25 cigarettes, is burned. 14:25:14

1 There are hazards to Premier. The carbon 14:25:18
2 monoxide levels probably would be different, much 14:25:22
3 like the Eclipse now that's under test marketing. 14:25:24
4 Even that kind of technology would 14:25:26
5 probably have been safer than to continue to do what 14:25:28
6 you did. 14:25:28
7 There are documents that speak to the 14:25:30
8 issue of having the ability to address some of the 14:25:34
9 nitrosamines that are present in tobacco smoke. I 14:25:36
10 can't go into all the details but there is a lot of 14:25:40
11 talk in here about we can take this out or we can 14:25:42
12 take this out. 14:25:42
13 There was a debate and a discussion within 14:25:46
14 these documents amongst one of the companies that 14:25:48
15 actually promoted -- I can't remember which 14:25:50
16 cigarette it was, it promoted what they proclaimed 14:25:54
17 to be kind of safer, and the industry then turned 14:25:58
18 saying we are just not going to do that anymore. 14:26:00
19 Q. Doctor, is there anything else that you think the 14:26:04
20 tobacco companies should have done differently in 14:26:06
21 the manufacture of cigarette products? 14:26:08
22 MS. WALBURN: Well, I am going to object 14:26:10
23 to that question in terms of form and it's 14:26:12

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24 unanswerable in the state it's been asked. 14:26:14

25 THE WITNESS: I think you have asked that 14:26:16

1 before, and they could have made a safer product a 14:26:20

2 long time ago. 14:26:20

3 BY MR. LOSS:

4 Q. You mean other collectors' items? 14:26:32

5 MS. WALBURN: Objection, form. 14:26:34

6 THE WITNESS: I know one thing, if they 14:26:36

7 would have taken all the nicotine out of the 14:26:38

8 products, we wouldn't be having this discussion 14:26:40

9 today because nobody would smoke them because 14:26:44

10 nicotine is the drug delivered by this device that 14:26:48

11 keeps people smoking, and they had the technology to 14:26:50

12 take all of the nicotine out and not do it in the 14:26:54

13 kind of the smoke and mirrors way of a low-tar, 14:26:58

14 low-nicotine cigarette. 14:26:58

15 They had the technology to do that as 14:27:00

16 evidenced by Next and evidenced by the ammonia 14:27:02

17 technology here. That's what I mean. 14:27:06

18 BY MR. LOSS:

19 Q. In terms of compensation, as reflected in your 14:27:10

20 report, what should the tobacco companies have done 14:27:12

21 differently in terms of cigarette design? 14:27:14

22 MS. WALBURN: I am going to object to the 14:27:16

23 form of the question and asked and answered. 14:27:18

24 THE WITNESS: Compensation, as best I can 14:27:22

25 tell from the published literature, as well -- that 14:27:30

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I have reviewed, as well as what's in the internal 14:27:32
documents, was basically a charade because you all 14:27:38
knew that smokers weren't going to smoke them like 14:27:42
that, and you did it so that they would continue to 14:27:46
be smokers and be reassured that they weren't doing 14:27:50
harm. 14:27:50

Remember, you are feeding into a 14:27:52
rationalization and denial system that all the 14:27:54
person that's addicted to a drug wants to hear is 14:27:58
maybe if you did it this way it would be safer. 14:28:02

The example I would give you would be the 14:28:04
alcoholic who drinks a fifth of vodka a day, and if 14:28:06
I, as a physician, were to say, well, you know, 14:28:10
that's really causing your liver lots of trouble. 14:28:12
Maybe if you just were to drink wine or beer, that 14:28:16
would be okay. 14:28:16

That's the wrong advice to an alcoholic 14:28:20
because that's exactly what that person wants to 14:28:22
hear, they want to hear that it's an endorsement of 14:28:26
the ability to continue to use the addicting 14:28:30
substance in another form, and what we are talking 14:28:34
about here is just another form of the drug nicotine 14:28:36
and all that it carries with it. 14:28:38

BY MR. LOSS:

Q. What is cigarette pressure drop? 14:28:40

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1 A. As I understand it, there -- and I think that one of 14:28:52
2 the experts that has to do with aerosols and so on 14:28:56
3 probably can explain it more, but as I understand 14:28:58
4 it, it has to do with the pressure in different 14:29:00
5 parts of the cigarette and how that affects the 14:29:04
6 delivery of the different constituents in 14:29:06
7 cigarettes. 14:29:08
8 That would be kind of a general definition 14:29:08
9 but I would defer to Channing Robertson, who 14:29:12
10 probably could give you a better answer than I. 14:29:14
11 Q. Do you know how it's measured? 14:29:16
12 A. I would have to go back and look and see in -- if 14:29:20
13 it's measured in millimeters of mercury or 14:29:30
14 centimeters of water. That's the way usual 14:29:32
15 pressures are measured. 14:29:34
16 Q. Doctor, if you got two cigarettes, one with high 14:29:36
17 pressure drop and one with low pressure drop and you 14:29:40
18 apply identical puff effort to each one, which 14:29:44
19 cigarette will give you a larger volume of smoke per 14:29:46
20 puff? 14:29:46
21 A. I think you can tell from my previous answer that I 14:29:50
22 haven't studied that. I am sure if you gave me ten 14:29:54
23 minutes I could figure it out from the internal 14:29:56
24 documents because they talk a lot about that. It 14:29:58
25 has to do with the draw of the cigarette. 14:30:00

1 Q. In the compensation studies you have reviewed could 14:30:04

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2 some oversmoking have been due to the design of the 14:30:08
3 cigarette used? 14:30:08
4 A. Oversmoking meaning what? 14:30:10
5 Q. Compensating upward. 14:30:14
6 A. Design? I think that compensation is due to the 14:30:22
7 design. I mean, I don't know which part of the 14:30:24
8 design you are talking about, but they wouldn't 14:30:28
9 compensate if they had a cigarette that delivered 14:30:30
10 the usual -- so if a person goes from smoking a 14:30:34
11 Marlboro to a Marlboro Light, then it is the design 14:30:40
12 of the Marlboro Light that would allow them to draw 14:30:50
13 only a certain concentration of nicotine and tar in 14:30:50
14 the smoke, and so the design of that cigarette would 14:30:52
15 then lead to their compensation. I mean, I don't 14:30:56
16 understand your question. 14:30:56
17 Q. Well, does using ventilation alter smoke yields in 14:31:00
18 test cigarettes? 14:31:02
19 A. Ventilation is one of the -- one of the ways to 14:31:04
20 basically have the FTC method give a different -- 14:31:08
21 different yield, if you will. Ventilation holes 14:31:12
22 are -- and there can be small numbers, large 14:31:16
23 numbers, some -- depends on the cigarette. 14:31:20
24 Q. Does using ventilation raise or lower the pressure 14:31:22
25 drop of a cigarette? 14:31:22

1 A. Again, I would have to defer to Dr. Robertson as far 14:31:28
2 as the technical aspects of that. I can tell you 14:31:32
3 what my patients say. They say that the low-tar and 14:31:34
4 low-nicotine cigarettes are -- they have to work 14:31:38

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5 harder at it and so they do work harder at getting 14:31:42
6 the levels of nicotine that they need to get the 14:31:44
7 kick or the hit upstairs that they want from the 14:31:46
8 nicotine, and how that relates to higher or lower, 14:31:50
9 I -- 14:31:50
10 Q. Well, yesterday, Doctor, you said that your opinions 14:31:52
11 are usually based on the science, so I would like to 14:31:56
12 focus on the science. 14:31:56
13 Does an individual's puffing effort remain 14:32:00
14 constant regardless of the delivery of the 14:32:04
15 cigarette? 14:32:04
16 MS. WALBURN: I am going to object to 14:32:06
17 counsel's little speech there. 14:32:06
18 THE WITNESS: I think I may have said that 14:32:10
19 yesterday about the science. I try to decide 14:32:14
20 everything I can as well as I can based on the 14:32:16
21 science. I don't try to decide things based on 14:32:18
22 anecdotes. 14:32:20
23 That's kind of the context that I would 14:32:22
24 put that in, so that you understand that, but I also 14:32:26
25 base what I know and what we do on other things as 14:32:30

1 well, experience, training, and in this case, this 14:32:36
2 kind of wealth of documents. 14:32:38
3 So, again, I think I have already answered 14:32:40
4 this to some degree. Dr. Robertson can talk to you 14:32:44
5 about pressure drops and volumes and lots of stuff, 14:32:48
6 and I think that if that's your question having to 14:32:52

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7 do with that, then that might be a better source. 14:32:54
8 BY MR. LOSS:
9 Q. Well, Doctor, is it your view that pressure drop, 14:33:00
10 puff duration, and these other puffing parameters 14:33:02
11 are unrelated to the compensation phenomenon? 14:33:06
12 A. No. What I said was that the way that I understand 14:33:10
13 and the way that my patients understand 14:33:12
14 compensation, it has to do with depth of 14:33:16
15 ventilation, holding your breath longer, and those 14:33:20
16 sorts of things, covering up the ventilation holes, 14:33:22
17 other things that they might do. 14:33:26
18 The design part of it has to do with what 14:33:28
19 your companies tried to do to figure out how to best 14:33:32
20 do that, and they probably have more techniques to 14:33:34
21 kind of fool the smoker than I could ever imagine. 14:33:38
22 They are very inventive. 14:33:40
23 So there are things that they probably do 14:33:42
24 on the technical side of it to develop the things. 14:33:46
25 I am dealing with the practical part of it as far as 14:33:48

1 what happens to the real person on the other side of 14:33:52
2 the equation, what happens to the patient. 14:33:54
3 And that's when I say depth of 14:33:58
4 ventilation, holding the breath longer, those are 14:34:00
5 terms that are -- that they understand. 14:34:02
6 Q. Doctor, when smokers smoke cigarettes, do the 14:34:08
7 volumes of the puffs they take typically decline as 14:34:10
8 the cigarette is consumed? 14:34:14
9 A. It depends on the smoker. 14:34:16

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10 Q. Does an individual's puffing effort remain constant 14:34:20
11 regardless of the delivery of the cigarette? 14:34:22
12 A. It depends on the smoker. 14:34:24
13 Q. Does an individual's puffing effort remain constant 14:34:28
14 regardless of the pressure drop of the cigarette? 14:34:30
15 A. Depends on the smoker. I mean, smokers smoke these 14:34:36
16 things differently, and that's -- so some -- and it 14:34:40
17 depends on the time of the day. I mean, so you are 14:34:42
18 asking broad questions about smokers, in general, 14:34:46
19 and it's not an answerable question because there is 14:34:48
20 a lot of different ways that people smoke, time of 14:34:52
21 day. 14:34:54
22 I bet if you were to look at what happens 14:34:56
23 in the first thing in the morning of an individual 14:34:58
24 and what happens in the late afternoon, they would 14:35:00
25 smoke that cigarette differently. 14:35:02

1 Q. What is mouth spill? 14:35:04
2 A. What's what? 14:35:06
3 Q. Mouth spill. 14:35:08
4 A. That's not a term that I am used to talking about. 14:35:10
5 Q. Smoke that comes out of the mouth from some smokers 14:35:14
6 before they inhale. 14:35:16
7 A. I understand what you said. 14:35:20
8 Q. Do you know why it occurs? 14:35:22
9 A. (Indicating.) 14:35:24
10 Q. Doctor, I am going to ask you to turn to page 154 of 14:35:28
11 the Surgeon General's Report. And I am sorry, I 14:35:32

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12 only have one extra copy. It is a clean copy so I 14:35:34
13 would ask you not to mark in it. They are hard to 14:35:38
14 come by. 14:35:38
15 MS. WALBURN: I am sure you won't mind if 14:35:42
16 I look on. 14:35:42
17 MR. LOSS: Oh, no, help yourself. 14:35:44
18 BY MR. LOSS:
19 Q. Page 154. Would you like at Table 1, please, 14:35:46
20 Behavioral Measures of Cigarette Smoking. 14:35:50
21 Did you see that the U.S. Surgeon General 14:35:52
22 of 1988 has separated puffing behavior from 14:35:54
23 inhalation behavior? 14:35:56
24 Do you see that? 14:35:56
25 A. Uh-huh, I see that, at least in this table they did, 14:36:00

1 as a measure of cigarette smoking. 14:36:04
2 Q. Now, Doctor, which of these items listed on either 14:36:06
3 column would influence puff duration? 14:36:10
4 A. It depends on the smoker. I mean, this is a list of 14:36:22
5 behavioral measures that have to do with smoking, 14:36:26
6 and it will vary from person to person. It will 14:36:28
7 also vary from cigarette to cigarette. It's not as 14:36:30
8 simple as having a nice table with two columns to 14:36:36
9 it. Smokers smoke differently. If they get -- if 14:36:40
10 you give them a different product they will smoke 14:36:42
11 differently. 14:36:42
12 So it depends on the smoker. 14:36:46
13 Q. Well, maybe I wasn't clear in my question. 14:36:48
14 A. Okay. 14:36:50

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15 Q. The table is Behavioral Measures of Cigarette 14:36:52
16 Smoking. Can you think of any other behavioral 14:36:56
17 measures besides the ones listed here that would 14:37:00
18 influence puff duration? 14:37:02
19 A. Well, I would just say that, actually, if you go -- 14:37:22
20 you are taking this table in the context of just the 14:37:26
21 table, and you can't do that, because if you go back 14:37:30
22 to the previous page, "The relationships among these 14:37:32
23 behavioral measures have been studied. For 14:37:36
24 instance, duration and volume of puffing are 14:37:38
25 generally highly correlated, although they vary 14:37:44

1 somewhat from smoker to smoker." 14:37:48
2 So, I mean, it sounds so simple to put 14:37:50
3 this in a table form. And you asked me a question 14:37:54
4 which one is more important and which one isn't. 14:37:56
5 But the text really -- and I think if I had a chance 14:38:02
6 to read the whole text you have thrown at me -- 14:38:08
7 though I have reviewed this, I haven't read it for 14:38:10
8 quite a while, a text that's, you know, several 14:38:12
9 hundred pages long, and the page before that lists 14:38:16
10 several measures of cigarette smoking that have been 14:38:18
11 objectively defined and measured. 14:38:20
12 "The relationship, among these behavioral 14:38:22
13 measures, have been studied. For instance, duration 14:38:26
14 and volume of puffing are generally highly 14:38:28
15 correlated, although they vary somewhat from smoker 14:38:32
16 to smoker." 14:38:32

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17 Now, I could go on and read the rest of it 14:38:34
18 but I -- let's read on "Peak smoke flow rate has 14:38:42
19 been reported to be moderately correlated with puff 14:38:42
20 volume."
21 Q. There is no question pending. 14:38:44
22 MS. WALBURN: Well, you are interrupting 14:38:46
23 him. 14:38:46
24 BY MR. LOSS:
25 Q. Can you look at page 154. 14:38:48

1 A. Yeah. 14:38:48
2 Q. I want to know, do you see in the middle of the 14:38:52
3 first paragraph, and read the first staff of it to 14:38:58
4 yourself if you would like, but I am going to start 14:39:00
5 with the sentence "Using another approach." 14:39:02
6 A. Okay. 14:39:14
7 Q. "Zacny & Associates, 1987, independently varied 14:39:20
8 three aspects of smoking: Puff volume, inhalation 14:39:24
9 volume, and lung exposure duration. They found that 14:39:26
10 increases in puff volume from 15 to 60 millimeters 14:39:30
11 produced proportional increases in plasma nicotine 14:39:34
12 level, whereas increases in inhalation volume from 14:39:38
13 10 or 20 to 60 percent of vital capacity where lung 14:39:40
14 exposure duration from 5 to 21 seconds had no such 14:39:46
15 effect." 14:39:46
16 Do you see that, Doctor? 14:39:48
17 A. I see that. 14:39:48
18 Q. Do you have any basis for disagreeing with that? 14:39:52
19 A. I would have to look at the report. This is one 14:39:54

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20 summary sentence of a paper that I don't know how 14:39:58
21 long it was, I am not familiar with it, and I don't 14:40:02
22 know where it was published. Maybe you can tell me 14:40:06
23 all that. At the end of this chapter it should tell 14:40:10
24 us. 14:40:10
25 Q. Well, Doctor, I don't think the source matters. My 14:40:12

1 question is --
2 A. Oh, the source does matter, when it comes to science 14:40:16
3 the source does matter a lot. 14:40:18
4 Q. Are you familiar with Zacny? 14:40:18
5 A. I am trying to remember if I am or not. 14:40:22
6 MS. WALBURN: Counsel, we are going to 14:40:24
7 want a break. 14:40:26
8 MR. LOSS: Okay. 14:40:28
9 MS. WALBURN: I am not sure if the 14:40:30
10 question is pending or -- 14:40:32
11 MR. LOSS: I think it it. 14:40:34
12 THE WITNESS: Although I am trying to 14:40:34
13 remember if I am or not. 14:40:36
14 MR. LOSS: Well, let's go off the record.
15 THE WITNESS: Pharmacology, Biochemistry 14:40:46
16 and Behavior -- that's the journal it was in, and I 14:40:48
17 would have to see that -- it's the Journal of 14:40:54
18 Pharmacology and Experimental Therapeutics. 14:40:58
19 I would have to look at that article to 14:41:00
20 know. One of the authors is Maxine Stitzer and she 14:41:04
21 is at Johns Hopkins, so -- 14:41:06

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22 BY MR. LOSS:

23 Q. Is Stitzer a recognized expert in the field? 14:41:08

24 A. Yeah, she has done a lot of work in nicotine, so 14:41:10

25 that's -- when you said the source doesn't make any 14:41:14

1 difference, it does. 14:41:14

2 Q. So that's a reliable source, in your opinion? 14:41:16

3 A. Well, I don't know, I would have to read the article 14:41:18

4 but at least I am familiar with the person or some 14:41:20

5 of the coauthors, so that makes it so that it might 14:41:22

6 be something -- but I could not answer this question 14:41:24

7 based on a sentence taken from a report that is ten 14:41:28

8 pages -- ten journal pages long. I mean, I couldn't 14:41:32

9 do that. 14:41:32

10 MR. LOSS: Okay. Let's go off the 14:41:36

11 record. 14:41:36

12 VIDEOGRAPHER: Temporarily going off the 14:41:38

13 video record. Time is now 2:41 p.m. 14:41:42

14 (A recess was taken.) 14:45:10

15 VIDEOGRAPHER: We are back on the video 15:10:20

16 record. The time is now 3:10 p.m. 15:10:24

17 MS. WALBURN: And the record should 15:10:26

18 reflect that we are now more than 11 hours into this 15:10:28

19 deposition and we will be expecting it to conclude 15:10:32

20 accordingly. 15:10:32

21 MR. LOSS: Videographer, according to our 15:10:36

22 records, how much time is remaining? 15:10:38

23 VIDEOGRAPHER: I have a run time of 10 15:10:44

24 hours and 32 minutes on tape. 15:10:46

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25 MS. WALBURN: That means that the 15:10:50

1 videographer has stopped the tape unbeknownst to us 15:10:52
2 and we object to that procedure. We are going by 15:10:58
3 the videographer's statements on the record at the 15:10:58
4 beginning and conclusion of each session, as well as 15:11:00
5 the realtime transcript. Let's proceed. 15:11:00
6 MR. DARLING: At this point on the 15:11:02
7 record -- 15:11:02
8 MS. WALBURN: I don't need any speeches. 15:11:04
9 Let's proceed. 15:11:04
10 MR. DARLING: That's fine. Let me point 15:11:06
11 out on the record that my time calculation shows 15:11:08
12 that ten hours have elapsed. 15:11:10
13 MS. WALBURN: We are not much interested 15:11:12
14 in your timekeeping. Let's proceed, Counsel. 15:11:12
15 MR. LOSS: I will defer to the 15:11:14
16 videographer's statements as to how much time was 15:11:16
17 remaining. 15:11:16
18 MS. WALBURN: The videographer was 15:11:18
19 obviously instructed by defense counsel as to how to 15:11:20
20 keep time. We were going by the official statements 15:11:22
21 throughout the proceedings of the videographer on 15:11:26
22 the record. We are not going to have any secrets 15:11:28
23 going on here about how time is kept.
24 MR. LOSS: Mr. Videographer, has any 15:11:32
25 defense counsel told you how to keep time? 15:11:34

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1 MR. WILSON: He is not under oath. 15:11:36
2 MS. WALBURN: I want the videographer to 15:11:38
3 be stating -- I am going by the videographer's 15:11:40
4 statements on the record about the time it started. 15:11:42
5 Now let's proceed. 15:11:42
6 MR. DARLING: Excuse me. I am 15:11:46
7 participating in these depositions. I would like to 15:11:48
8 know what the basis is for your statement that 15:11:50
9 defense counsel have instructed the videographer to 15:11:52
10 keep time in any particular fashion. What is the 15:11:56
11 basis of that statement? 15:11:56
12 MS. WALBURN: The basis of my statement is 15:11:58
13 that the videographer is making statements on the 15:12:00
14 record about the time and they are not in accordance 15:12:02
15 with the statement that the videographer just made 15:12:04
16 at your instruction. 15:12:06
17 MR. DARLING: That is the sole basis for 15:12:08
18 the accusation against defense counsel? 15:12:10
19 MS. WALBURN: Let's proceed. 15:12:12
20 MR. DARLING: Is it, Ms. Walburn? 15:12:14
21 MS. WALBURN: I have also seen you, as we 15:12:16
22 are sitting here, telling people to go on and off 15:12:18
23 the record when the record is fairly continuous. 15:12:20
24 Let's proceed.
25 BY MR. LOSS:

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1 Q. Doctor, what does mouth feel or mouth full mean? 15:12:22
2 A. Mouth feel or mouth full? 15:12:26
3 Q. Yes, sir. 15:12:26
4 A. In the context of smoking? 15:12:34
5 Q. Yes, sir. 15:12:34
6 A. I guess I have never really thought about those 15:12:38
7 terms, and I guess I haven't really seen them in the 15:12:40
8 documents that I recall. I mean, obviously what 15:12:46
9 goes into the mouth there you feel, and what the 15:12:50
10 sensations are -- there are some sensations there. 15:12:52
11 I would assume that's what that's talking 15:12:54
12 about but I am not -- I haven't seen those terms in 15:12:58
13 your documents. 15:12:58
14 Q. Mouth feel is the mouth sensation reflecting the 15:13:04
15 texture or body of the smoke in the mouth, correct? 15:13:08
16 MS. WALBURN: Are you reading from 15:13:10
17 something, Counsel? 15:13:10
18 MR. LOSS: My outline. 15:13:12
19 MS. WALBURN: And is that a verbatim quote 15:13:14
20 from a source? 15:13:16
21 MR. LOSS: No source. It's a question. 15:13:18
22 MS. WALBURN: So it's your representation 15:13:20
23 that's not a verbatim quote. 15:13:22
24 MR. LOSS: I am making no representations, 15:13:24
25 I am asking questions. 15:13:24

1 MS. WALBURN: You just made a 15:13:24
2 representation. 15:13:24

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3 MR. LOSS: I have no source in my outline. 15:13:28
4 MS. WALBURN: That wasn't the 15:13:30
5 representation you made. 15:13:32
6 BY MR. LOSS:
7 Q. Doctor, answer the question. 15:13:34
8 A. What is the question? 15:13:34
9 Q. Mouth feel is a mouth sensation reflecting the 15:13:36
10 texture or body of the smoke in the mouth, right, or 15:13:38
11 correct? 15:13:38
12 A. The definition of mouth feel is not something that I 15:13:44
13 have seen defined. So is that your definition? 15:13:48
14 Q. Is that the first time you have heard a definition 15:13:50
15 of mouth feel or mouth full in connection with 15:13:52
16 cigarette smoking? 15:13:52
17 A. I have seen mention of what happens in the mouth and 15:13:54
18 what happens in the throat and what happens in these 15:14:00
19 places, but, I mean, I -- it's pretty clear from the 15:14:04
20 documents that the real -- real thing in cigarette 15:14:06
21 smoke that makes a difference is how much nicotine 15:14:10
22 you get in, and all these other things are kind of 15:14:12
23 trivial sidelines. 15:14:14
24 People who I deal with on a day-to-day 15:14:16
25 basis who are smokers don't think about mouth full 15:14:22

1 or mouth feel. I mean, that's -- 15:14:24
2 Q. Are you aware of any studies that address mouth feel 15:14:28
3 as the controlling factor in determining puff 15:14:32
4 duration? Yes or no, if you can answer that one. 15:14:36
5 A. I am unaware of that, but it -- you know, it could 15:14:38

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6 have been mixed in a lot of these documents and a 15:14:42
7 lots of the things that I reviewed, but I haven't 15:14:44
8 seen an article that has to do specifically with 15:14:46
9 that. 15:14:46
10 Q. Do you know if nicotine contributes to mouth feel? 15:14:50
11 A. Since I have already kind of told you that the term 15:14:56
12 is a little bit foreign to me, I would have to say 15:15:00
13 that what I know about nicotine and the fact that it 15:15:02
14 doesn't taste very good, if it goes into the mouth, 15:15:06
15 would have something to do with how a cigarette is 15:15:08
16 smoked, and furthermore, from what the documents 15:15:12
17 talk about, they talk about using various chemicals 15:15:14
18 to try to deal with what happens in the mouth as far 15:15:18
19 as harshness and taste and flavoring and all that 15:15:22
20 stuff. 15:15:22
21 Q. How would you design an experiment to determine 15:15:24
22 whether or not nicotine contributes to mouth feel? 15:15:26
23 A. Never thought about that before. 15:15:36
24 Q. Well, couldn't you -- 15:15:38
25 MS. WALBURN: Excuse me, Counsel. 15:15:40

1 BY MR. LOSS:
2 Q. Oh, were you finished? I am sorry. 15:15:42
3 A. I have never thought about that before but 15:15:42
4 experiments can be designed to answer most any valid 15:15:46
5 scientific question if you have the measures, 15:15:48
6 develop the aims, know what the hypothesis is, kind 15:15:52
7 of in reverse order, hypothesis, aims, design. You 15:15:56

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8 can design studies to do that, but I have not 15:16:00
9 thought about doing that. 15:16:02
10 Q. So as of today, you don't know? 15:16:06
11 MS. WALBURN: Objection, asked and 15:16:08
12 answered. 15:16:08
13 THE WITNESS: I haven't thought about 15:16:10
14 designing a study to answer that question, but it 15:16:14
15 could be done. It's not that I don't know, it's 15:16:16
16 that I haven't thought about it before in the 15:16:16
17 context of your question, which was, could you 15:16:18
18 design such a study. I will say, yeah, I mean, 15:16:22
19 studies can be designed. 15:16:24
20 BY MR. LOSS:
21 Q. Do all smokers compensate? 15:16:28
22 A. "All" is too all-encompassing. It depends on which 15:16:32
23 cigarettes they smoke. Obviously, people who smoke 15:16:34
24 unfiltered Lucky Strikes are less likely to 15:16:38
25 compensate because there is not any ventilation 15:16:42

1 holes, and so on. 15:16:44
2 But that individual might smoke that Lucky 15:16:46
3 Strike differently as opposed to someone smoking a 15:16:50
4 vented cigarette, which are designed to give lower 15:17:02
5 delivery in the FTC method, so the answer would be 15:17:06
6 no, it depends on -- not all smokers compensate. It 15:17:08
7 depends upon the smoker and the cigarette that they 15:17:12
8 are using. 15:17:12
9 Q. Do new smokers compensate, starters? 15:17:14
10 A. Some probably do, some probably don't. 15:17:20

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11 Q. Is that true, that by definition, starters don't 15:17:26
12 compensate? 15:17:28
13 MS. WALBURN: Objection, form. 15:17:32
14 THE WITNESS: It depends on the individual 15:17:34
15 as far as how they smoke the cigarette. I mean, 15:17:36
16 it's not -- it's -- that's a -- there is not a 15:17:40
17 simple answer to that kind of question because some 15:17:46
18 smokers smoke very aggressively at the very 15:17:48
19 beginning, and they may smoke a low-tar, 15:17:52
20 low-nicotine cigarette and smoke it more 15:17:54
21 aggressively. 15:17:56
22 In that sense, they would be overcoming 15:17:58
23 the ventilation mechanisms to deliver something to 15:18:02
24 be lower. 15:18:02
25 Starters is a term that has to do with the 15:18:04

1 tobacco industry. That's not something that is in 15:18:08
2 the scientific literature except in reference to the 15:18:12
3 tobacco industry, when they talk about youth and how 15:18:14
4 to get them to start smoking. Those are called 15:18:18
5 starters. 15:18:18
6 BY MR. LOSS:
7 Q. Are you telling me the word "starters" is not in the 15:18:20
8 tobacco literature, the public literature studying 15:18:24
9 nicotine? 15:18:26
10 MS. WALBURN: Counsel, you are 15:18:28
11 interrupting Dr. Hurt repeatedly and I would 15:18:30
12 appreciate it if you would offer him the courtesy of 15:18:32

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13 allowing him to finish his answers. 15:18:36

14 THE WITNESS: I am not saying it's not in 15:18:38

15 the literature, but it is more prevalent in the 15:18:40

16 internal documents as it relates to youth smoking 15:18:44

17 that I have seen. Those are starters. That's what 15:18:46

18 they talk about. 15:18:48

19 BY MR. LOSS:

20 Q. What's an ultra low-tar product in the 15:18:50

21 United States? 15:18:52

22 A. Oh, the first one comes to mind would be Carlton, I 15:18:58

23 guess, would be termed an ultra. 15:19:00

24 Q. I am sorry, I withdraw my question. 15:19:02

25 Do you know the yields? That's what I -- 15:19:04

1 in terms of yields, what does ultra low tar mean in 15:19:10

2 the United States? 15:19:14

3 A. I don't know that there is a definition for ultra 15:19:14

4 low tar. I think that's something that is put on 15:19:18

5 the label. I don't know that there is an absolute 15:19:22

6 yield that would be labeled that way. 15:19:26

7 Carlton is the one that comes to mind as 15:19:28

8 being the -- kind of the one that most people think 15:19:30

9 about. 15:19:30

10 Q. What definition were you using -- 15:19:32

11 A. Not many people smoke them, though. 15:19:34

12 Q. Excuse me, sir. What definition were you using when 15:19:38

13 you used the words "ultra low-tar products" in your 15:19:42

14 report? 15:19:42

15 A. When things are labeled in the advertising, this is 15:19:44

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16 an ultra low-tar, ultra low cigarette -- ultra 15:19:48
17 low-nicotine cigarette, that's -- and then in some 15:19:52
18 of the literature that I have reviewed, those are 15:19:56
19 the terms that are used for those lower yield 15:20:00
20 cigarettes. 15:20:00
21 Q. What are tar bands, B-A-N-D-S? 15:20:04
22 A. I have seen that term, but I -- it escapes me at the 15:20:14
23 moment, tar bands. 15:20:16
24 Q. Doctor, do you believe that smokers of ultra low-tar 15:20:22
25 products properly can take some health reassurance 15:20:26

1 in that they receive substantial reduction of 15:20:30
2 nicotine and tar? 15:20:30
3 MS. WALBURN: Objection, form and 15:20:38
4 misstates prior testimony. 15:20:38
5 THE WITNESS: So could you repeat the 15:20:40
6 question because it's a complicated question? 15:20:42
7 BY MR. LOSS:
8 Q. Sure. Doctor, do you believe that smokers of ultra 15:20:44
9 low-tar products properly can take some health 15:20:46
10 reassurance in that they receive substantial 15:20:50
11 reduction of nicotine and tar? 15:20:56
12 A. In studies that have been done -- and I think that's 15:20:58
13 what I say in the report, in the studies that have 15:21:00
14 been done, the people who smoke ultra low-tar 15:21:04
15 cigarettes, there is -- it's almost impossible for 15:21:10
16 them to compensate because there's so many 15:21:12
17 ventilation holes and so many other things that are 15:21:14

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18 done to make it that delivery. 15:21:16

19 So when you look at the cotinine levels of 15:21:18

20 people smoking those cigarettes and the FTC yield, 15:21:22

21 they are not able to compensate, as well as people 15:21:26

22 who are smoking low tar -- regular low-tar 15:21:28

23 cigarettes compared to regular filtered cigarettes. 15:21:32

24 So in those people, they would have the consumption 15:21:36

25 of probably lesser levels of nicotine. 15:21:40

1 The problem with all that is that in the 15:21:42

2 more recent evidence, as the smoking behavior has 15:21:46

3 changed where people are using these products, they 15:21:50

4 tend to inhale deeper and hold their breath longer. 15:21:56

5 And I don't think we really know what the 15:22:04

6 ultimate outcome of that's going to be. There is a 15:22:06

7 study from Switzerland which shows there is an 15:22:08

8 increased rate of adenocarcinoma of the lung, which 15:22:10

9 is located in the periphery of the lung, and those 15:22:14

10 authors speculated that it was because these 15:22:18

11 subjects smoked low-tar cigarettes and they inhaled 15:22:22

12 deeper to get the carcinogens out to the periphery 15:22:26

13 of the lungs. 15:22:26

14 So I don't think in the current market 15:22:30

15 that there is such a thing as a safe cigarette. 15:22:32

16 Q. What's an ultra low-tar product in the U.K.? Is it 15:22:42

17 the same as the U.S.? 15:22:44

18 A. Probably not. You have your own -- you have your 15:22:46

19 own brands, I assume. 15:22:48

20 Q. To assess the risk of low versus high-delivery 15:22:54

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21 cigarettes, for example, can a researcher use 15:22:56
22 epidemiology? 15:22:58
23 A. Epidemiology is how we have to look at some of these 15:23:02
24 things because of the long latent period between the 15:23:06
25 time a person starts smoking and the time that they 15:23:10

1 develop the disease, and use it even in looking at 15:23:12
2 populations of smokers and, in fact, you can look at 15:23:14
3 it using populations of countries. 15:23:18
4 So that lung cancer rates in our country, 15:23:22
5 nonexistent in the 1905 range, rare disease then, 15:23:26
6 now the most common cause of cancer death in both 15:23:30
7 men and women, and the epidemiologic studies showed 15:23:34
8 that, very clearly, a long time ago. 15:23:36
9 Q. Does epidemiology take into account compensation? 15:23:38
10 A. You have to think about epidemiologic studies as 15:23:42
11 being very broad population base studies which look 15:23:46
12 at the whole population, and when you have -- have 15:23:50
13 differences within the population, differences of 15:23:54
14 smoking materials, types of smokers, as far as 15:24:00
15 heaviness of smoking, gender, race, there are other 15:24:04
16 factors that are there. 15:24:06
17 So that would be one factor that people 15:24:10
18 have tried to look at and have tried to speculate 15:24:12
19 whether or not the introduction of the low-tar, 15:24:14
20 low-nicotine cigarettes has caused a dramatic 15:24:18
21 reduction in these diseases. That's one of the 15:24:20
22 things that has been talked about. 15:24:22

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23 But as far as I can tell, the incidence of 15:24:26
24 lung cancer continues to go up in women. It is now 15:24:28
25 the leading cause of cancer death in women, has been 15:24:32

1 for about five or six years, and cancer -- lung 15:24:36
2 cancer deaths in women just ten years or so ago was 15:24:38
3 not -- was not even on the scene, so -- 15:24:42
4 Q. Doctor, do you know if there is any risk reduction 15:24:46
5 by moving from a 30 to a 15-milligram tar cigarette, 15:24:50
6 yes or no? 15:24:50
7 A. In what context, in an individual or in a population 15:24:54
8 or -- 15:24:54
9 Q. In a population. 15:24:58
10 MS. WALBURN: Objection, foundation. 15:25:00
11 THE WITNESS: I would have to defer to 15:25:04
12 maybe someone has looked at that. I haven't studied 15:25:08
13 that extensively as far as the epidemiologic 15:25:10
14 studies. 15:25:12
15 BY MR. LOSS:
16 Q. Have you heard of Sir Peter Froggatt? 15:25:14
17 A. That's not a name that's come into my mind. 15:25:18
18 Q. Doctor, would you recommend to a low-tar smoker who 15:25:26
19 refuses to quit smoking that he should switch to an 15:25:30
20 ultra low-tar product? 15:25:32
21 A. If I had a person who was in that phase or the stage 15:25:38
22 of change which you would probably describe as 15:25:44
23 contemplative in that situation, at least in front 15:25:46
24 of me, talking to me about it, but not having set a 15:25:50
25 date to stop, I would encourage that person to 15:25:54

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1 continue to try to stop altogether. 15:25:56
2 Q. Right. And can you answer my question. Would you 15:25:58
3 recommend to a low-tar smoker who refuses to stop 15:26:00
4 smoking altogether that he should switch to an ultra 15:26:04
5 low-tar product? 15:26:06
6 MS. WALBURN: Well, I am going to object 15:26:08
7 to counsel's little speech there and also on the 15:26:10
8 basis that the question is asked and answered. 15:26:12
9 THE WITNESS: I would advise that 15:26:14
10 individual to continue to try to stop, to work with 15:26:16
11 me to set a date to stop. 15:26:22
12 BY MR. LOSS:
13 Q. And in the meantime? 15:26:22
14 MS. WALBURN: Objection, form. 15:26:24
15 THE WITNESS: In the meantime I would be 15:26:26
16 working with that person to try to help him to 15:26:28
17 stop. 15:26:28
18 BY MR. LOSS:
19 Q. So you would recommend that he stick with his 15:26:30
20 regular brand in the meantime and work with you? 15:26:30
21 A. I would recommend that they consider setting another 15:26:34
22 date to stop and to try to work towards setting a 15:26:36
23 date to stop and stopping on that date. 15:26:38
24 Q. Would you recommend to an ultra low-tar smoker to 15:26:40
25 switch to a high-tar cigarette? 15:26:42

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1 A. In what context? 15:26:46
2 Q. Assuming a smoker refused to quit smoking but asked 15:26:50
3 your advice as a doctor, "Doctor, I am thinking 15:26:52
4 about switching to a high-tar product. Should I 15:26:56
5 switch with my ultra low Carlton, or not?" 15:27:00
6 A. In my experience over the last 20 years I can recall 15:27:04
7 of no patient that's ever asked me if they should 15:27:10
8 switch from a low-tar -- ultra low-tar cigarette to 15:27:14
9 a low-tar cigarette. That is just not something 15:27:16
10 that happens. 15:27:18
11 Q. Why not? 15:27:18
12 A. You have made up the question and I don't know where 15:27:26
13 the question came from, but I have a fair amount of 15:27:30
14 clinical experience dealing with a large number of 15:27:32
15 patients over time and that question has just 15:27:38
16 never -- never, never come up. 15:27:40
17 Q. Fair enough. 15:27:42
18 Have you ever heard that downward 15:27:42
19 compensation is more robust than upward 15:27:46
20 compensation? 15:27:48
21 MS. WALBURN: Objection, form. 15:27:50
22 THE WITNESS: I don't know what you are 15:27:50
23 talking about as far as robust. What does that 15:27:54
24 mean? 15:27:54
25 BY MR. LOSS:

1 Q. Is downward compensation more complete than upward 15:27:56

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2 compensation, more accurate? 15:28:00

3 MS. WALBURN: Objection, form. 15:28:00

4 THE WITNESS: I still don't understand. 15:28:02

5 More complete, more active? I don't understand what 15:28:04

6 you are meaning by that question. 15:28:08

7 BY MR. LOSS:

8 Q. Fair enough. 15:28:08

9 A. If you have something we can refer to, I mean, I 15:28:12

10 just -- that's -- 15:28:14

11 Q. Let's try it another way. 15:28:16

12 A. All right. 15:28:16

13 Q. When a smoker switches from a higher-delivery 15:28:18

14 product to a lower-delivery product, he may 15:28:20

15 compensate, right? 15:28:22

16 A. Uh-huh, he may compensate. 15:28:24

17 Q. And in such a scenario, is the up compensation due 15:28:30

18 to tar, nicotine, or both? 15:28:34

19 A. If a person goes from a low-delivery product -- 15:28:40

20 Q. That's not what I said. 15:28:42

21 A. I am trying to -- your question was very long and 15:28:44

22 you are reading it. 15:28:46

23 Q. I will start it again. 15:28:46

24 A. And if you will let me see what your question is I 15:28:50

25 can maybe answer it. But it's hard to follow your 15:28:54

1 long question. It's a long question. 15:28:54

2 MS. WALBURN: And, Counsel, can I just 15:28:56

3 also state that I am having trouble understanding 15:28:58

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4 what you are saying -- maybe it's because I think 15:29:00
5 you are chewing gum and it's a little hard to hear 15:29:02
6 the articulation, but I am having a little trouble 15:29:06
7 picking it up. 15:29:08
8 MR. LOSS: Take it out. 15:29:08
9 MS. WALBURN: Thank you. 15:29:10
10 BY MR. LOSS:
11 Q. When a smoker switches from a higher-delivery 15:29:12
12 cigarette to a lower-delivery cigarette, when the 15:29:14
13 smoker smokes the lower-delivery cigarette, that 15:29:18
14 smoker may compensate, correct? 15:29:20
15 A. Correct. 15:29:22
16 Q. In such a scenario, is the up compensation, meaning 15:29:28
17 a low-delivery product, but he has taken more than 15:29:30
18 the FTC yield, is that up compensation due to tar, 15:29:34
19 nicotine, or both? 15:29:36
20 A. So that's what threw me with your question. You put 15:29:40
21 up compensation in there. It's compensation, it's 15:29:42
22 not up or down compensation in that sense because 15:29:46
23 you are going from a high-delivery system to a 15:29:48
24 lower-delivery system according to the FTC method, 15:29:52
25 and -- correct? Is that what you -- you go from a 15:29:56

1 high-delivery system -- regular Marlboro to a 15:30:00
2 Marlboro Light. That's probably what we are talking 15:30:02
3 about. 15:30:02
4 So in that situation, a person would 15:30:06
5 compensate based more on the nicotine than any other 15:30:12
6 factor. 15:30:12

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7 Q. How do you know? 15:30:14
8 A. The nicotine is the driving force behind this 15:30:14
9 addiction. 15:30:16
10 Q. How do you know? How do you know that compensation 15:30:18
11 is due to nicotine? 15:30:20
12 A. Nicotine is the drug. We are talking about a drug 15:30:24
13 dependence here. We are not talking about some 15:30:26
14 taste deal, we are talking about a dependence that 15:30:30
15 has to do with neurotransmitters that get activated 15:30:34
16 by nicotine. They don't get activated by tar. And 15:30:36
17 the repeated behavior that they have is because of 15:30:40
18 the nicotine, it's not because of other factors. 15:30:42
19 If you could do all of that with a 15:30:44
20 cigarette that had no nicotine in it, people would 15:30:48
21 not smoke. Your own documents say that, that if we 15:30:52
22 were to take the nicotine out of the cigarettes, no 15:30:54
23 one is going to smoke. We are going to -- our 15:30:56
24 business is going to go bankrupt, we are going to 15:31:00
25 lose our business. Nicotine is the central feature 15:31:02

1 in this. 15:31:02
2 Q. How do you know smokers aren't compensating for 15:31:06
3 throat impact? 15:31:06
4 MS. WALBURN: Objection, asked and 15:31:08
5 answered. 15:31:08
6 THE WITNESS: We are dealing with a 15:31:10
7 dependence, an addiction, on the nicotine, and when 15:31:16
8 the levels go down, they compensate to increase 15:31:18

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9 those levels. 15:31:20

10 It would be like the alcoholic, I gave you 15:31:24

11 an example earlier, who drinks a fifth a day and you 15:31:26

12 say, well, why don't you switch to beer or wine, and 15:31:30

13 they would just simply drink more. They would 15:31:32

14 compensate by drinking a bigger quantity, same level 15:31:36

15 of alcohol, to do the same thing we are talking 15:31:38

16 about with cigarettes. 15:31:40

17 Nicotine is the central feature, it's the 15:31:42

18 drug we are talking about. It's not to do with 15:31:44

19 taste, it's not to do with the, quote, "impact" on 15:31:48

20 the throat. 15:31:50

21 In fact, one of the documents talks about 15:31:50

22 when the impact on the throat is felt, then that 15:31:56

23 gives a cue to the individual about the real kick 15:32:00

24 that's going to happen after that. 15:32:02

25 So those two things may be connected but 15:32:04

1 the ultimate delivery part of this is nicotine to 15:32:08

2 the brain. 15:32:08

3 BY MR. LOSS:

4 Q. How do you know -- well, let me ask you. What are 15:32:12

5 the usual biochemical markers that are used in 15:32:14

6 compensation studies? 15:32:16

7 A. Cotinine is one of them, probably the most -- most 15:32:20

8 common one that's been used because it has a longer 15:32:22

9 half-life than nicotine. You could use nicotine but 15:32:24

10 then you would have to figure out where you were on 15:32:26

11 the scale of when you drew the blood sample. You 15:32:30

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12 could do urine levels of cotinine or nicotine. 15:32:32
13 Cotinine would be one of the ones that's most 15:32:36
14 commonly used. 15:32:36
15 Q. Will any of the tests that you mentioned tell you 15:32:40
16 how much tar is deposited in or taken out by the 15:32:52
17 body during smoking? 15:32:54
18 A. Those are biochemical tests to do with nicotine. 15:32:54
19 Q. Right. So how do you determine how much tar is 15:32:56
20 deposited in or taken up by the body during 15:32:58
21 smoking? 15:32:58
22 MS. WALBURN: Objection, form. 15:33:00
23 THE WITNESS: Nicotine and tar go 15:33:06
24 together, and that's -- when they talk about the tar 15:33:08
25 and nicotine ratio and tar and nicotine yields, they 15:33:10

1 are really tied together, as far as the delivery. 15:33:16
2 If you don't have the tar in the aerosol, 15:33:20
3 you can't get the nicotine in, and so, therefore, in 15:33:24
4 many respects, cotinine or nicotine would be a 15:33:28
5 surrogate for the exposure that a person might have 15:33:30
6 to the tar levels. 15:33:32
7 It is difficult, and I am not sure it's 15:33:34
8 possible, to measure tar in the body because it is 15:33:40
9 a -- you can look at the lungs of people and see how 15:33:44
10 black they are, you can look at those -- you can 15:33:46
11 look at the induction of enzymes in the liver and 15:33:50
12 the way that people metabolize drugs because some of 15:33:54
13 the things carried on the tar have to do with that. 15:33:58

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14 It is a difficult measure to make. 15:33:58

15 So it's -- the nicotine is what we think 15:34:00

16 about as the -- kind of the surrogate for that. But 15:34:06

17 it -- from an addiction standpoint, it's only 15:34:08

18 relevant to the point that the tar carries the 15:34:10

19 carcinogens which is what kills the people. 15:34:14

20 BY MR. LOSS:

21 Q. Doctor, would you expect there to be compensation in 15:34:18

22 studies examining the reduction of tar independent 15:34:22

23 of nicotine? 15:34:24

24 A. If you have got studies like that I would be glad to 15:34:26

25 look at them. I don't know what -- I am not sure -- 15:34:28

1 you mentioned studies. Which studies are you 15:34:32

2 talking about? 15:34:32

3 Q. Hypothetical studies. In a study where you have 15:34:36

4 reduced tar, independent of nicotine, so the 15:34:40

5 nicotine stays the same, where you have got reduced 15:34:44

6 tar, otherwise it's the same as the smoker's regular 15:34:48

7 brand, would you expect the smoker to compensate? 15:34:50

8 MS. WALBURN: Objection, form. 15:34:52

9 THE WITNESS: So the same amount of 15:34:56

10 nicotine and reduced tar? 15:34:58

11 BY MR. LOSS:

12 Q. Yes. 15:34:58

13 A. I am not aware of any studies that have looked at 15:35:02

14 that. Maybe you have some that you are getting at. 15:35:06

15 Q. I am asking you what you -- 15:35:06

16 A. Hypothetical things are kind of hard to deal with, 15:35:10

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17 because from this side of the table I don't know if 15:35:14
18 you are -- if you have got another sheet behind your 15:35:18
19 sheet that talks about a study that you could cite 15:35:20
20 to me. 15:35:20
21 Q. Well, I don't know what you would expect. What 15:35:22
22 would you expect? 15:35:24
23 MS. WALBURN: I am going to object to the 15:35:26
24 form of the question and calls for speculation. 15:35:28
25 Also, asked and answered. 15:35:30

1 THE WITNESS: Yeah, the nicotine is the 15:35:32
2 driving force behind the continued smoking 15:35:34
3 behavior. If you have nicotine in the cigarette and 15:35:38
4 you lower the nicotine delivery of the cigarette, 15:35:42
5 the person will compensate to increase the level of 15:35:44
6 nicotine 15:35:46
7 BY MR. LOSS:
8 Q. So if you keep the nicotine level the same and 15:35:48
9 reduce the tar, you would not expect the smoker to 15:35:52
10 compensate? 15:35:52
11 MS. WALBURN: Objection, asked and 15:35:54
12 answered, form of the question, and calls for 15:35:56
13 speculation. 15:35:58
14 THE WITNESS: The nicotine is the driving 15:36:00
15 force behind the continued use, and so if you lower 15:36:04
16 the nicotine by -- delivery, not absolutely lower 15:36:08
17 the nicotine, but lower the nicotine delivery by the 15:36:10
18 FTC method, then you could expect that the patient 15:36:14

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19 would increase by compensation the nicotine levels. 15:36:20

20 BY MR. LOSS:

21 Q. Doctor, would you agree that it is difficult to draw 15:36:24

22 a conclusion as to the role of tar in relation to 15:36:26

23 smoking behavior? 15:36:28

24 MS. WALBURN: Objection, form. 15:36:30

25 THE WITNESS: There is a lot written, 15:36:42

1 probably more in your internal documents about tar, 15:36:44

2 and the tar and nicotine ratio, and the way that it 15:36:48

3 affects, quote, "consumer satisfaction" and the 15:36:52

4 effects on the mouth and the effects on the throat 15:36:54

5 and so on. There is a lot written here. 15:36:58

6 I have seen a lot of things in the 15:37:00

7 internal documents. It's not something that is 15:37:02

8 prevalent in the scientific literature as far as tar 15:37:06

9 except in the respect that it's a carcinogen and 15:37:12

10 that the tar delivery of a -- or the tar delivery 15:37:16

11 has to do with the formation of cancer. 15:37:18

12 BY MR. LOSS:

13 Q. Would you turn to page 58 of the 1988 Surgeon 15:37:22

14 General's Report. 15:37:22

15 A. Okay. 15:37:30

16 Q. In the first paragraph, halfway down -- 15:37:48

17 MS. WALBURN: Do you have a copy, 15:37:52

18 Counsel? 15:37:52

19 MR. LOSS: Sure. Can you reach it? 15:37:58

20 BY MR. LOSS:

21 Q. "In a later study, sudden co-workers found that when 15:38:02

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22 nicotine yield was held constant, smokers of 15:38:04
23 lower-tar cigarettes puffed more smoke and at higher 15:38:08
24 drug plasma levels. These results suggested that 15:38:10
25 smokers were compensating for reduced delivery of 15:38:14

1 tar by inhaling a greater volume of smoke. Because 15:38:16
2 these two studies used different experimental 15:38:18
3 designs, it is difficult to draw a conclusion as to 15:38:22
4 the role of tar in relation to smoking behavior." 15:38:24
5 Do you see that? 15:38:24
6 A. Yeah, I guess that's why I asked you what you were 15:38:28
7 quoting from in your little outline because it 15:38:32
8 sounded like it came directly from a scientific 15:38:34
9 article, so do I need to ask you every time you have 15:38:36
10 a question like that if it came from something out 15:38:42
11 of the Surgeon General's Report that's on page 58 of 15:38:44
12 a 7 or 800 page document? 15:38:46
13 What you failed to read into the record 15:38:48
14 is, "The possible role of tar in the maintenance of 15:38:56
15 the cigarette smoking habit has been considered. 15:39:00
16 Goldfarb and co-workers, 1976, studied the effects 15:39:06
17 of tar content determined by cigarette smoking 15:39:08
18 machine testing on the subjective reactions to 15:39:10
19 cigarette smoking. Ratings of strength were not 15:39:14
20 related to the tar index of cigarettes. The results 15:39:18
21 were interpreted as indicating that tar did not have 15:39:22
22 a role in the maintenance of cigarette smoking 15:39:24
23 behavior." 15:39:26

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24 And then you picked up with the other 15:39:26

25 sentence in the middle of the paragraph. So the 15:39:30

1 context in which you are asking your questions, the 15:39:32

2 next time you have a question like that I will need 15:39:34

3 to see the document before I will answer it because 15:39:38

4 this is really taken out of context. You read in 15:39:40

5 your statement basically what was written here in 15:39:44

6 the form of your question. 15:39:44

7 Q. Doctor, there are two studies. 15:39:46

8 A. Correct. 15:39:48

9 Q. Came to different results, correct? 15:39:50

10 A. Correct. 15:39:50

11 Q. According to the '88 Surgeon General. And the 15:39:52

12 Surgeon General concluded, quote, "It is difficult 15:39:56

13 to draw a conclusion as to the role of tar in 15:40:00

14 relation to smoking behavior." That's in 1988, 15:40:02

15 correct? 15:40:02

16 MS. WALBURN: Objection, misstates the 15:40:04

17 Surgeon General's Report, which states in a 15:40:06

18 statement written back in 1988, a decade ago, and 15:40:12

19 the Surgeon General's statement is based on the 15:40:14

20 results of two published studies and that's it. 15:40:18

21 BY MR. LOSS:

22 Q. Doctor, would you agree with the assertion that more 15:40:20

23 information is required on the role of smoke 15:40:22

24 components other than nicotine with respect to 15:40:26

25 compensation effects? 15:40:28

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A. The central role in all of this has to do with 15:40:32
nicotine, the drug, the drug nicotine, which I think 15:40:36
your company still doesn't even probably call it a 15:40:38
drug outside of the internal documents, certainly 15:40:42
publicly you don't talk about nicotine addiction. 15:40:46
The drug is the primary factor having to do with 15:40:48
compensation, period, period. 15:40:50
Q. How do you know -- have you done any experiments? 15:40:52
MS. WALBURN: Objection, asked and 15:40:54
answered on multiple occasions, and I would caution 15:40:56
you, Counsel, that particularly with the clock 15:40:58
ticking on you, you might conserve your time more 15:41:02
wisely. 15:41:02
BY MR. LOSS:
Q. Have you done any experiments on nicotine 15:41:04
compensation? 15:41:04
A. The wealth of the information contained within these 15:41:06
documents, also, the information contained in the 15:41:08
scientific literature, my own experience with 15:41:12
patients, says that nicotine is the drug. 15:41:18
Dependence is what we are talking about. 15:41:20
People smoke for the nicotine, they don't 15:41:22
smoke for the tar. They compensate for the 15:41:24
nicotine, and that's a fact. 15:41:26
And when you have a fact you don't need to 15:41:28

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1 create doubt about it, which is what your industry 15:41:32
2 has been doing all along. There is no doubt that 15:41:34
3 nicotine is the drug that we are talking about and 15:41:36
4 it causes dependence. 15:41:38
5 So whether or not tar has anything to do 15:41:40
6 with compensation, I am not sure anyone outside of 15:41:44
7 the industry really cares except that it carries 15:41:46
8 carcinogens in that kills people. 15:41:50
9 Q. Does nicotine cause impact? 15:41:52
10 A. There are probably a variety of things within 15:41:56
11 cigarette smoke that causes what your industry calls 15:41:58
12 impact. 15:41:58
13 Q. Do you know? 15:42:00
14 A. Do I know what? 15:42:02
15 Q. What those other things are besides nicotine. 15:42:04
16 A. There are 4,000 compounds in cigarette smoke. 15:42:06
17 Nicotine, if it's too high a level, can cause more 15:42:12
18 throat irritation because it's a toxic substance, 15:42:16
19 it's basically a poison, so if you add too much -- 15:42:20
20 or have too much delivery of nicotine, then it can 15:42:22
21 cause irritants -- irritations in the throat, sure. 15:42:24
22 Q. Doctor, would you turn to page 160 of the '88 15:42:28
23 Surgeon General's Report? 15:42:28
24 MS. WALBURN: Do you have a copy of that 15:42:30
25 page, Counsel? 15:42:32

1 MR. LOSS: You know, it's in one of the 15:42:32
2 doctor's articles that I haven't used today, and I 15:42:36

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3 am happy to provide you with a copy of it. If we 15:42:42
4 can go off the record, please. 15:42:42
5 VIDEOGRAPHER: We are temporarily going 15:42:44
6 off the video record. 15:42:46
7 MS. WALBURN: We are not going off the 15:42:48
8 record while counsel handles exhibits, and I would 15:42:50
9 appreciate that there not be unilateral instructions 15:42:52
10 about going on and off the record. We don't go off 15:42:56
11 the record to find exhibits. 15:42:58
12 MR. LOSS: Then you won't get to use one. 15:43:00
13 You can look over his shoulder. 15:43:00
14 MS. WALBURN: I would also tell counsel 15:43:02
15 that the practice in this litigation has been to 15:43:04
16 provide exhibits both for the witness and for 15:43:06
17 counsel. 15:43:06
18 And I understand that from time to time 15:43:08
19 that there might be an oversight in that regard, but 15:43:10
20 you obviously came well-prepared to use the Surgeon 15:43:14
21 General's Report on repeated occasions, and I am 15:43:16
22 going to object to this procedure of failing to 15:43:18
23 provide appropriate exhibits. 15:43:20
24 MR. DARLING: I would like to point out 15:43:22
25 that the procedure that's been followed in the 15:43:24

1 depositions to date has been to go off the record 15:43:26
2 when handling exhibits if necessary. 15:43:28
3 MS. WALBURN: Well, Mr. Darling, we don't 15:43:30
4 need your colloquy filling up the record on this. 15:43:34

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5 And I am going to tell you right now, 15:43:34
6 because you might want to start thinking about it, 15:43:36
7 when we hit the 12-hour mark, which is going to be 15:43:40
8 in about 20 minutes, you are going to have to make a 15:43:48
9 decision, because if you proceed with this 15:43:50
10 deposition beyond the 12-hour mark, then I will tell 15:43:50
11 you that in all depositions that the plaintiffs take 15:43:52
12 from this point forward in this litigation, whether 15:43:54
13 they are fact depositions or expert depositions, we 15:43:56
14 are going to take the position, and we will go to 15:44:00
15 the Court on this, that the examining attorney has 15:44:02
16 the prerogative of instructing the videographer and 15:44:04
17 the court reporter to go off the record for the 15:44:06
18 reviewing and handling of exhibits. 15:44:08
19 So it's your decision to make when we 15:44:10
20 reach the 12-hour point, and then you can advise 15:44:12
21 your clients of the decision you made and of the 15:44:16
22 procedures you are going to use when we go forward 15:44:18
23 in this deposition.
24 MR. DARLING: And we can make it clear 15:44:20
25 that when you talk about the 12-hour point, you are 15:44:22

1 not talking about what the videographer has 15:44:24
2 recorded, nor what I have calculated. 15:44:24
3 MS. WALBURN: Well, the record is right on 15:44:28
4 the realtime transcript, and you obviously have some 15:44:30
5 difficulty with that, but again, it's your decision 15:44:32
6 to make and you can advise your clients and all of 15:44:34
7 your codefendants because I will note that we have 15:44:36

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8 lost about half of the -- half of the defense 15:44:38
9 counsel here from what we started off with yesterday 15:44:42
10 and this morning. 15:44:42
11 So you can advise your clients and your 15:44:44
12 co-defendants that this was a decision that you made 15:44:48
13 during the deposition. 15:44:48
14 MR. DARLING: Ms. Walburn, do you 15:44:50
15 recognize that the Court said that "When calculating 15:44:54
16 said hours that parties shall use the following as 15:44:56
17 examples of time not to be counted as recorded, time 15:44:58
18 used to voice objections, ruling upon objections, 15:45:00
19 recesses, yield breaks, time off the record, 15:45:04
20 et cetera"? 15:45:04
21 Are you aware of that? 15:45:06
22 MS. WALBURN: I am also aware that your 15:45:08
23 own liaison counsel attempted to bring a motion 15:45:10
24 before the court about how to handle documents and 15:45:12
25 the court wasn't much interested in entertaining it, 15:45:14

1 so let's proceed. 15:45:18
2 BY MR. LOSS:
3 Q. Doctor, what I would like you to do is focus on the 15:45:32
4 chart that says FTC Nicotine Yield. 15:45:42
5 Do you see that? 15:45:42
6 A. I see that. 15:45:44
7 Q. What does the X axis represent on that graph? 15:45:48
8 A. One axis is the FTC yield, the other is blood 15:45:54
9 cotinine concentrations. The vertical axis is the 15:45:56

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10 blood cotinine concentrations and the horizontal 15:45:58
11 axis is the FTC nicotine yield. 15:46:00
12 Q. And what does this chart show? 15:46:06
13 MS. WALBURN: Objection, form. 15:46:10
14 THE WITNESS: Literally? It shows a bunch 15:46:16
15 of little dots and a line in the middle. I mean, I 15:46:20
16 need to study this a little bit before I can 15:46:22
17 interpret it. 15:46:24
18 You want me to tell you what it shows? I 15:46:26
19 can tell you what it shows. If you want me to 15:46:26
20 interpret it or try to interpret it, I will try to 15:46:28
21 do that. 15:46:30
22 BY MR. LOSS:
23 Q. Well, the Y axis is cotinine levels, correct? 15:46:38
24 A. The vertical axis is the cotinine levels, and the 15:46:42
25 horizontal axis is the FTC nicotine yield, and the 15:46:46

1 little dots in here represent smokers who are 15:46:52
2 smoking cigarettes at those different yields ranging 15:46:58
3 from it looks like a .1 to a high of 2.0, and then 15:47:06
4 there are corresponding cotinine levels. 15:47:10
5 Q. Now, Doctor, are you aware that Benowitz has 15:47:14
6 calculated average levels of cotinine? 15:47:18
7 A. Average levels of what? In what context? When, 15:47:22
8 which subjects? 15:47:24
9 Q. In the context of this charge. 15:47:24
10 A. In this? 15:47:26
11 Q. Yeah. 15:47:26
12 A. I am looking at the Surgeon General's Report and it 15:47:36

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13 really has -- it really has only the chart in it. I 15:47:38
14 am trying to find the reference to it if you -- 15:47:40
15 Q. Well, let's look at page 38. 15:47:42
16 MR. WILSON: Let him answer, please. 15:47:44
17 THE WITNESS: Page 38 of what? 15:47:48
18 BY MR. LOSS:
19 Q. Surgeon General's Report. 15:47:48
20 A. Okay. 15:47:48
21 Q. It says, under Cotinine Levels, the second -- the 15:47:50
22 third sentence, "Cotinine blood levels average about 15:47:54
23 250 to 300 nanograms per milliliter in groups of 15:47:58
24 cigarette smokers," correct? 15:48:00
25 A. That's what it says. 15:48:02

1 Q. Do you have any reason to disagree with that 15:48:04
2 number? 15:48:04
3 MS. WALBURN: I am going to object to the 15:48:08
4 form of the question. 15:48:08
5 MR. LOSS: I will withdraw it. I will 15:48:12
6 withdraw it. 15:48:12
7 THE WITNESS: It is what it is. I mean, 15:48:14
8 it's several studies, Benowitz, Hall, Haley, 15:48:18
9 Axelrad, Tilton, Langone, and so there is one, two, 15:48:22
10 three, four, four studies cited. 15:48:26
11 And somebody said that in those studies -- 15:48:30
12 the surgeon general's committee said in those 15:48:32
13 studies it averaged 250 to 300 nanograms per mill in 15:48:36
14 groups of cigarette smokers, but there are obviously 15:48:40

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15 different groups here. 15:48:40

16 BY MR. LOSS:

17 Q. What does the dark line on page 160 represent going 15:48:44

18 across the chart? 15:48:46

19 MS. WALBURN: Objection, form. 15:48:48

20 THE WITNESS: The dark line in the middle 15:48:50

21 has to do with the significance of the -- or the 15:48:56

22 differences between the cotinine levels for the 15:49:00

23 different yields, and it's a non-significant line. 15:49:02

24 That means that they have done a 15:49:04

25 statistical analysis to see if those smokers on one 15:49:10

1 side of this graph are different than the others as 15:49:12

2 far as their blood cotinine levels. 15:49:26

3 BY MR. LOSS:

4 Q. What does that mean, non-significant? 15:49:28

5 A. Non-statistically significant. 15:49:32

6 Q. Do you take it to mean that the people below the 15:49:34

7 line are not addicted? 15:49:36

8 MS. WALBURN: Objection, form. 15:49:38

9 THE WITNESS: This hasn't anything to do 15:49:38

10 with addiction. 15:49:40

11 BY MR. LOSS:

12 Q. What does it have to say about the FTC test method? 15:49:42

13 MS. WALBURN: Objection, form. 15:49:44

14 THE WITNESS: Well, what this speaks to is 15:49:46

15 the way that smokers will smoke different types of 15:49:48

16 cigarettes, and have in their body, not in the 15:49:52

17 little filters from the FTC method, but actually in 15:49:58

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18 their body, evidence of absorption of nicotine. 15:50:00
19 That's what cotinine is. Continine is a metabolic 15:50:06
20 product of nicotine that has a longer half-life, and 15:50:12
21 so it's used to measure nicotine exposure in the 15:50:16
22 organism, and so what this shows is that people 15:50:20
23 smoking a lower-tar, lower-nicotine cigarette based 15:50:24
24 on the FTC yield did not have a significantly 15:50:28
25 different cotinine level compared to people smoking 15:50:32

1 a higher FTC yield cigarette. 15:50:36
2 That's what the line means. The "NS" up 15:50:38
3 in the corner means non-significant. There is no 15:50:42
4 significant difference. 15:50:44
5 BY MR. LOSS:
6 Q. Between what? 15:50:44
7 A. There is no significant difference in the subjects 15:50:50
8 in this study as far as their actual nicotine intake 15:50:54
9 as measured by cotinine compared to the FTC yield, 15:51:00
10 so this does show compensation. 15:51:04
11 People smoking lower-tar, lower-nicotine 15:51:08
12 cigarettes, the .4's, the .2's, are able to 15:51:12
13 compensate and have in their organism the same level 15:51:14
14 of nicotine, in this case cotinine, as people 15:51:18
15 smoking a cigarette delivering 1.2. 15:51:22
16 Q. Doesn't it show that smokers can take whatever they 15:51:24
17 want from the cigarette regardless of the FTC 15:51:26
18 nicotine yield? 15:51:28
19 MS. WALBURN: Objection, form. 15:51:30

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20 THE WITNESS: This really shows 15:51:32
21 compensation is what it shows, and the one up above 15:51:34
22 shows the cotinine levels compared to cigarettes per 15:51:38
23 day, and you can see that there is clearly, with the 15:51:40
24 line going upward, the more cigarettes a day you 15:51:44
25 smoke in this study, the more -- the higher the 15:51:48

1 level of cotinine. 15:51:48
2 So there is more exposure of nicotine in 15:51:50
3 that context, but if you have -- you do the 15:51:54
4 comparison with the yield of the cigarettes 15:51:56
5 according to the FTC method, this is the graph that 15:52:00
6 shows compensation for people smoking lower-tar, 15:52:04
7 lower-nicotine cigarettes. 15:52:06
8 BY MR. LOSS:
9 Q. Does it show that there is individual variation in 15:52:10
10 terms of a theoretical threshold for an addiction? 15:52:14
11 MS. WALBURN: Objection, form, asked and 15:52:16
12 answered. 15:52:16
13 THE WITNESS: This really, I think, 15:52:18
14 doesn't have to do with addiction. This has to do 15:52:22
15 with people who are current smokers smoking a 15:52:26
16 variety of numbers and a variety of types of 15:52:30
17 cigarettes a day. 15:52:30
18 And it shows that people who would switch 15:52:34
19 to a lower tar, lower-nicotine cigarette can 15:52:36
20 compensate by extracting basically the same levels 15:52:40
21 of nicotine that they would get out of a regular 15:52:42
22 cigarette, and that's what we talked about earlier, 15:52:44

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23 going from a Marlboro, regular Marlboro to Marlboro 15:52:50
24 Light, the person could compensate. 15:52:50
25 There is individual variation. There is 15:52:52

1 one person way up here that has a cotinine level of 15:52:56
2 over 800 with a yield of 1. -- 1.0 or 1.1 or 15:53:02
3 something like that. 15:53:02
4 So there are people that can smoke 15:53:04
5 differently, but that person also might correspond 15:53:08
6 to people smoking 50 cigarettes a day on the other 15:53:10
7 chart. 15:53:12
8 So this one takes into account the FTC 15:53:14
9 yield, but not necessarily the number of cigarettes 15:53:18
10 smoked per day. 15:53:18
11 In your internal documents, however, it 15:53:20
12 talks about the compensation issue having to do more 15:53:24
13 with the nicotine levels than it does with 15:53:26
14 cigarettes per day. They are able to compensate 15:53:30
15 without increasing the number of cigarettes a day 15:53:32
16 that they have smoked. That's what your internal 15:53:34
17 documents say. 15:53:34
18 MR. LOSS: We have to change the tape. 15:53:38
19 VIDEOGRAPHER: This concludes the seventh 15:53:40
20 tape of the videotaped testimony of Dr. Hurt. The 15:53:44
21 time is now 3:53 p.m. 15:53:46
22 (A discussion was held off the
23 record.)
24 VIDEOGRAPHER: We are back on the video 16:00:26

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25 record. This is the eighth tape in the videotaped 16:00:28

1 deposition of Dr. Hurt and the time is now 4 o'clock 16:00:30
2 p.m. 16:00:34
3 BY MR. LOSS:
4 Q. Doctor, independent of the industry documents, tell 16:00:38
5 me what you know about, quote, "Pavlov's dogs," 16:00:44
6 unquote. 16:00:44
7 MS. WALBURN: Objection to the form. 16:00:46
8 THE WITNESS: You know, the first time I 16:00:48
9 thought about Pavlov's dogs has to do with the 16:00:52
10 industry documents, at least in the recent past. 16:00:56
11 I haven't thought about Pavlov's dogs for 16:00:58
12 a long time so it's hard to take it out of the 16:01:00
13 context of the documents. I mean, it's mentioned in 16:01:04
14 the documents and that's the first time I have heard 16:01:06
15 reference to Pavlov's dogs in I don't know how 16:01:10
16 long. 16:01:12
17 BY MR. LOSS:
18 Q. With respect to smoking, how do you know what is the 16:01:14
19 bell and how do you know what is the reward? 16:01:18
20 MS. WALBURN: Objection, form. 16:01:18
21 THE WITNESS: In relationship to what 16:01:22
22 Pavlov did with his experiments? 16:01:28
23 BY MR. LOSS:
24 Q. Yes, sir. 16:01:28
25 A. As far as the bell ringing and gastric acid 16:01:34

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1 secretion, is that what you mean? 16:01:36
2 Q. Yes. 16:01:36
3 A. So you are asking to draw an analogy between the 16:01:38
4 bell and the what? 16:01:40
5 Q. Pavlov's experiment. 16:01:40
6 A. The bell and -- 16:01:42
7 Q. And what is the bell in the smoking behavior? 16:01:44
8 MS. WALBURN: I am going to object to the 16:01:48
9 form and foundation since there has been no 16:01:50
10 testimony as to what the bell is in Pavlov's 16:01:54
11 experiments. 16:01:54
12 MR. LOSS: He mentions it in his expert 16:01:58
13 report. 16:01:58
14 BY MR. LOSS:
15 Q. Let's take a look at page -- 16:02:00
16 A. Let's do that. 16:02:02
17 Q. -- 15. 16:02:06
18 A. It's on page 15, the top of the page. 16:02:32
19 Q. What did you take that to mean, one -- what does 16:02:36
20 this sentence mean, "One B.A.T. document states that 16:02:40
21 this behavior is subconscious, a similar mechanism 16:02:44
22 to Pavlov's dogs"? 16:02:44
23 A. Well, the quotes are accurate, and so what the 16:02:46
24 document actually says is on page 102226312, a 16:02:52
25 B.A.T. document, "It is generally accepted that a 16:02:56

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1 large number of habitual smokers are influenced in 16:03:00
2 their smoking habit by the amount of nicotine that 16:03:02
3 they draw from cigarettes." Notice I didn't mention 16:03:04
4 tar. 16:03:06
5 "Over a period of time during which they 16:03:08
6 are learning how to smoky effectively, that is so 16:03:10
7 they do not make them feel -- themselves feel ill, 16:03:14
8 but do derive pleasure and satisfaction from 16:03:16
9 smoking, they probably build up an association in 16:03:20
10 their minds between the mouth sensations such as 16:03:26
11 flavor, irritation, and `impact' and the amount of 16:03:32
12 smoke that gives them the satisfaction to smoking. 16:03:34
13 This is a similar mechanism to Pavlov's dogs." 16:03:40
14 So just -- it was a curiosity to have 16:03:46
15 reference to dog experiments in the context of 16:03:52
16 smoking behavior, and what this -- if you go back 16:03:56
17 and then read what they said from before, then there 16:03:58
18 are things that the person, while they were 16:04:02
19 developing tolerance to the effect of nicotine, 16:04:04
20 might associate with smoking. 16:04:08
21 And that's what they term a similar 16:04:10
22 mechanism to Pavlov's dog. I don't think the person 16:04:14
23 that wrote this had done an experiment in the same 16:04:18
24 way that Pavlov did with the dogs. 16:04:22
25 Q. Fair enough. Now, you see where it says "impact"? 16:04:24

1 A. Yeah, it's in quotes, and I have always been curious 16:04:26
2 as to know why in these documents "impact" is in 16:04:30
3 quotes. I mean -- 16:04:30

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4 Q. Let me ask you a question. You gave two definitions 16:04:34
5 for impact yesterday, correct? 16:04:36
6 MS. WALBURN: Objection. 16:04:36
7 THE WITNESS: I would have to look back 16:04:38
8 and see what the question -- 16:04:40
9 BY MR. LOSS:
10 Q. Do you recall? 16:04:42
11 A. -- what the question is, and -- I mean, I -- I don't 16:04:44
12 know how many definitions -- 16:04:46
13 Q. My question is this -- 16:04:46
14 MS. WALBURN: Excuse me, Counsel, but you 16:04:48
15 are interrupting Dr. Hurt. 16:04:50
16 THE WITNESS: Yeah, I just don't 16:04:50
17 understand -- you said I gave two definitions. I 16:04:52
18 mean, yesterday was a long day. So what do you 16:04:56
19 mean? Or what's the question? 16:04:58
20 BY MR. LOSS:
21 Q. Does impact occur in the mouth? 16:05:00
22 A. According to what is written in these documents, 16:05:04
23 impact -- and we talked yesterday, that's why I 16:05:10
24 said, well, is there an industry definition for -- 16:05:12
25 well, I don't know if there is an industry 16:05:14

1 definition for impact. 16:05:16
2 Some of the documents speak to the effect 16:05:18
3 that smoke has on the back of the throat as being, 16:05:20
4 quote, "impact." That's what they -- that's what 16:05:24
5 the documents have said. 16:05:24

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6 Q. Is impact in the throat a pharmacological effect? 16:05:28
7 A. There are nicotinic receptors in the throat, there 16:05:34
8 are nicotinic receptors in the bronchi, there are 16:05:36
9 other receptors that are present, and it could be 16:05:40
10 simply a chemical reaction. Some of the documents 16:05:44
11 speak to underlying theory as to what it might be. 16:05:48
12 Q. How would you conduct a study to separate what's 16:05:52
13 more important to smokers, the throat impact 16:05:56
14 sensation or the CNS effects? 16:05:58
15 MS. WALBURN: Objection to form, and, 16:06:00
16 Counsel, you are asking questions that have been 16:06:02
17 asked repeatedly by, if not yourself, your 16:06:06
18 colleagues, and I am going to renew my objection to 16:06:08
19 this tag teach approach to depositions where you 16:06:10
20 bring in an army of lawyers, they tag team off, ask 16:06:14
21 duplicative questions, and then don't even have the 16:06:18
22 courtesy to stay around until the end of the 16:06:20
23 deposition. 16:06:20
24 BY MR. LOSS:
25 Q. You can answer. 16:06:22

1 A. Well, as I said earlier, if you have the right 16:06:26
2 hypothesis, the right aims, you can design a study. 16:06:28
3 Philip Morris has already done the study probably 16:06:32
4 because they introduced a cigarette called Next and 16:06:34
5 it doesn't exist as a product anymore. It didn't 16:06:38
6 have nicotine. 16:06:40
7 So if you wanted to do a quick and dirty 16:06:42
8 study, then promote Next as a new cigarette and see 16:06:44

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9 if anybody buys it; and secondly, see if anybody 16:06:48
10 continues to use it. 16:06:48
11 I don't think they will because your own 16:06:50
12 documents say that if you lower the nicotine below a 16:06:54
13 threshold level or if you were to eliminate nicotine 16:06:56
14 altogether, you would go out of business. 16:06:58
15 So nicotine is the central drug in all of 16:07:00
16 this, and that's supported by what's known 16:07:02
17 scientifically, but more importantly, your companies 16:07:08
18 knew all of that, so it's the nicotine, it's not the 16:07:10
19 other things. 16:07:10
20 Q. Did Next deliver throat impact? 16:07:14
21 A. I have not seen any internal documents from what 16:07:16
22 Philip Morris did with Next. I don't know of anyone 16:07:18
23 that ever smoked them, so it presumably had 16:07:24
24 everything else in the cigarette smoke except 16:07:26
25 nicotine. Your guess is as good as mine whether or 16:07:30

1 not it had impact. 16:07:30
2 Q. Do you know what effect adding magnesium chloride to 16:07:34
3 cigarettes has on the throat impact sensation? 16:07:36
4 A. No, I really don't. 16:07:40
5 MS. WALBURN: I just want to note, 16:07:42
6 Counsel, that we are at the 12-hour mark now so by 16:07:46
7 your conduct you will be setting the precedent for 16:07:48
8 future depositions. 16:07:50
9 MR. LOSS: Well, I intend to continue 16:07:52
10 based upon the videographer's records and based upon 16:07:54

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11 colloquy. I can't bind my other counsel. 16:07:58

12 MS. WALBURN: You are binding your other 16:08:00

13 counsel, and if you want a moment to confer, we will 16:08:02

14 give you a moment and we will go off the record and 16:08:06

15 you can conserve your time. 16:08:06

16 I will tell you what my position is and 16:08:08

17 then you can come back and tell me what you decide 16:08:10

18 to do, that time for reading documents, absent 16:08:16

19 unusual circumstances, does not go off the clock. 16:08:20

20 According to the Court's orders, colloquy 16:08:24

21 can be deducted from the clock, and we are willing 16:08:28

22 to give you a little bit of leeway over the 12-hour 16:08:30

23 mark for some of the colloquy that has gone on over 16:08:34

24 the past two days, but if you are going to take the 16:08:36

25 position that you are going to count the clock the 16:08:38

1 way Mr. Darling has and the way the videographer has 16:08:42

2 without announcing it on the record as we were 16:08:44

3 proceeding, then the plaintiffs are going to do the 16:08:46

4 same thing. 16:08:46

5 Now, I don't know why we have to dispute 16:08:52

6 on this because we are willing to reach a reasonable 16:08:54

7 accommodation. I think this is how we should govern 16:08:58

8 all the depositions. 16:08:58

9 We are not going to cut you off right at 16:09:00

10 the 12-hour point because there has been some 16:09:04

11 colloquy, although I will note that much of it has 16:09:06

12 been from defense counsel. 16:09:06

13 But if you are going to take the position 16:09:08

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14 that the examining attorney can say we are off the 16:09:12
15 clock whenever the witness is reviewing documents or 16:09:14
16 whenever an examining attorney is looking for 16:09:16
17 documents, then we are just going to do the same 16:09:18
18 thing in all of our depositions. 16:09:18
19 And again, I would be happy, whatever 16:09:20
20 decision you reach, to do my part in enforcing it on 16:09:24
21 the plaintiffs' side. I would expect the same to 16:09:26
22 happen on the defense side. 16:09:28
23 And if you want to consult them on your 16:09:28
24 counsel, that's fine, we can come back you can tell 16:09:32
25 us what your position is. 16:09:34

1 MR. LOSS: I do think I should consult, 16:09:36
2 but I do want to state for the record that in every 16:09:38
3 British American Tobacco deposition that has taken 16:09:42
4 place to date, which includes the depositions of 16:09:44
5 Broughton, Proctor and Greig, Marty Wivell has gone 16:09:50
6 off the record when witnesses were reviewing 16:09:54
7 documents. 16:09:54
8 In addition, Marty Wivell has deducted 16:09:56
9 colloquy. Those were not just fact depositions, 16:10:00
10 they also included 30.02 (f) depositions. I just 16:10:04
11 want to state that for the record. 16:10:06
12 MS. WALBURN: And let me just say that 16:10:08
13 30.02(f) depositions are fact depositions. 16:10:10
14 MR. LOSS: They are a little different. 16:10:12
15 MS. WALBURN: I don't think that every -- 16:10:12

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16 that your statement is accurate that in every B.A.T. 16:10:14
17 deposition that's been the case. 16:10:16
18 I will note, for example, that it's a 16:10:18
19 difference without a distinction with respect to the 16:10:22
20 Greig deposition because it was upgraded to a 16:10:24
21 Class A and it didn't use all 20 hours. 16:10:28
22 But I think our position is clear. I 16:10:28
23 don't think we have to fight about this because we
24 are willing to reach a reasonable accomodation, but
25 if you want to be controlling the clock in future 16:10:32

1 depositions the way Mr. Darling suggests, I want to 16:10:34
2 know about it now so that we can have a bilateral 16:10:36
3 agreement on this. And we can break now and you can 16:10:38
4 make up your mind. 16:10:40
5 MR. DARLING: No, actually, let's not 16:10:42
6 break right now. Let me put on the record that I 16:10:44
7 have never suggested that I am in some fashion the 16:10:46
8 official timekeeper. I have tried to inform you as 16:10:48
9 time went on my calculations, which I have tried to 16:10:52
10 do very carefully. 16:10:52
11 You have rejected those, you have said 16:10:54
12 they don't count, you said that the court reporter's 16:10:56
13 are the only ones that count. 16:10:58
14 I am perfectly willing to have the court 16:11:00
15 reporter calculate in a reasonable fashion, which I 16:11:04
16 believe is the way I have done it, but I am not 16:11:06
17 saying I am in control of the clock. 16:11:08
18 I am informing you and I have intended to 16:11:10

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19 inform you all along of the position that I believe 16:11:12
20 is the accurate position on the elapsed time. 16:11:14
21 MS. WALBURN: Well, look, let's not waste 16:11:18
22 more time on this. I mean, if you want to go 16:11:20
23 forward, we are going to -- it's a long day 16:11:22
24 already. 16:11:22
25 If the court reporter is fine to keep the 16:11:24

1 time, but the court reporter has to be instructed by 16:11:26
2 both sides about how to calculate it. 16:11:28
3 So you can make your decision. We will be 16:11:30
4 back in five minutes. 16:11:30
5 VIDEOGRAPHER: We are temporarily going 16:11:32
6 off the video record. The time is now 4:11 p.m. 16:11:36
7 (A recess was taken.)
8 VIDEOGRAPHER: We are back on the video 16:21:54
9 record. The time is now 4:21 p.m. 16:21:58
10 MS. WALBURN: The record should reflect 16:22:02
11 that off the record there was a brief conversation 16:22:06
12 among counsel. 16:22:08
13 It is the plaintiffs' understanding that 16:22:10
14 defense counsel, counsel for B.A.T. Co. and for CTR 16:22:12
15 combined have about 40 minutes of questioning and 16:22:14
16 answering left, and based upon that representation, 16:22:20
17 the plaintiffs are willing to proceed. 16:22:22
18 It is our understanding -- we are allowing 16:22:24
19 for that 40 minutes to take into account some of the 16:22:30
20 colloquy over the last two days, although I note 16:22:32

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21 that I would -- I would expect that that 40 minutes 16:22:36
22 is a more than generous accommodation for the 16:22:38
23 colloquy, and we are proceeding on that basis. 16:22:48
24 BY MR. LOSS:
25 Q. Doctor, in the Pavlov's dogs documents were the 16:22:54

1 author's statements about smoking and compensation 16:22:58
2 something that you believe B.A.T. Co. should have 16:23:00
3 communicated publicly? 16:23:04
4 MS. WALBURN: Objection, form. 16:23:08
5 THE WITNESS: If you refer down to the 16:23:12
6 next paragraph which says -- beginning "Nicotine is 16:23:14
7 the most pharmacologically active constituent in 16:23:18
8 tobacco smoke," and it's probably the most usual 16:23:22
9 factor for -- responsible for the maintenance of the 16:23:26
10 smoking habit. 16:23:26
11 I don't think B.A.T. has ever said that 16:23:28
12 publicly, that they think that nicotine is the most 16:23:32
13 pharmacologic -- and pharmacologic means, to me, a 16:23:34
14 drug. 16:23:36
15 I don't think that your company has ever 16:23:38
16 admitted that nicotine is a drug, so maybe they 16:23:40
17 should have made that part public because that has 16:23:42
18 to do with the addiction. 16:23:46
19 BY MR. LOSS:
20 Q. Do you know if the information that you just read 16:23:48
21 was kept secret from the public? 16:23:52
22 MS. WALBURN: Objection, form. 16:23:54
23 THE WITNESS: All I know is that these 16:23:56

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24 documents are labeled as being confidential and 16:24:00
25 that, to my knowledge, your company has never 16:24:06

1 admitted publicly that nicotine is a drug of 16:24:10
2 addiction. If it has, I missed it. 16:24:14
3 Actually, I think -- I wouldn't have 16:24:16
4 missed it because it would have been a headline in 16:24:18
5 some newspaper much like when the Liggett group 16:24:22
6 announced that they thought that nicotine was 16:24:24
7 addicting and caused cancer, that made the New York 16:24:26
8 Times headlines. 16:24:28
9 Had your company, back in the time that 16:24:30
10 this document was created, said to the public 16:24:32
11 nicotine is the most pharmacologic active 16:24:34
12 constituent in tobacco smoke, i.e., a drug, I think 16:24:40
13 that would have made the headlines. 16:24:42
14 So I don't know that they didn't do this, 16:24:44
15 but common sense would say that had they done that, 16:24:48
16 then that would have been a news maker of some sort, 16:24:50
17 even in England. 16:24:54
18 MR. LOSS: I would like to mark this as an 16:24:58
19 exhibit. 16:24:58
20 (Defendants' Deposition Exhibit 2471 16:25:22
21 was marked for identification.) 16:25:26
22 BY MR. LOSS:
23 Q. Doctor, could you turn to page 4 of Exhibit 2471. 16:25:32
24 A. Can you, first of all, tell me what this document 16:25:34
25 is. 16:25:34

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1 Q. It's a document dated June 27th, 1978, entitled 16:25:40
2 Compensation for Change Delivery. It's Bates Number 16:25:44
3 105553905 through Bates Number 3915. 16:25:52
4 The document also appears on your list of 16:25:54
5 company documents that you have reviewed. 16:25:58
6 A. And the company this is from? 16:26:02
7 Q. British American Tobacco Company. 16:26:08
8 MS. WALBURN: I am just confused, Counsel, 16:26:10
9 because there is no B.A.T. Co. stamp on the 16:26:12
10 document. I haven't seen one like this. 16:26:16
11 MR. LOSS: It's the same Bates Number as 16:26:18
12 on his list, and I can't explain why it doesn't have 16:26:22
13 a stamp, frankly, because I didn't copy the 16:26:24
14 document. 16:26:26
15 BY MR. LOSS:
16 Q. But if you could turn to page 4 of the document, do 16:26:28
17 you see the paragraph entitled "It is generally"? 16:26:34
18 Do you see that, Doctor, in the middle of the page? 16:26:38
19 A. Not yet, but I will -- I am still -- I am trying to 16:26:42
20 kind of -- 16:26:44
21 Q. Page 4. 16:26:44
22 A. Okay. I am still trying to kind of catch up with 16:26:48
23 you. This is a document that, if I have seen it, it 16:26:52
24 was a long time ago. 16:26:52
25 Q. Well, I mean, it's very much like the other 16:26:56

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1 document. If you would read the paragraph in the 16:26:58
2 middle. 16:26:58
3 A. Yeah, I see the thing in the middle. 16:27:02
4 MS. WALBURN: Objection to counsel's 16:27:02
5 speech, there. 16:27:04
6 BY MR. LOSS:
7 Q. Is this paragraph the same paragraph that you 16:27:06
8 previously read into the record? 16:27:08
9 A. Beginning with "It is generally accepted"? 16:27:12
10 Q. Yes, sir, the Pavlov's dogs. 16:27:14
11 A. "And seems unsatisfactory," that paragraph? 16:27:16
12 Q. Yes, sir. 16:27:18
13 A. It's almost the same. 16:28:00
14 Q. It's almost the same? 16:28:00
15 A. Except that in this version "impact" is capitalized 16:28:04
16 and has traditional quotation marks around it. In 16:28:08
17 the version that I had earlier it has single 16:28:10
18 asterisks and "impact" is not capitalized, and I am 16:28:14
19 not sure of the reason for the making it bigger in 16:28:18
20 this version, the version you handed me. 16:28:20
21 Q. Can you turn to Bates Number 3915, which is the last 16:28:24
22 page of the document. 16:28:26
23 A. (Indicating). 16:28:32
24 Q. Are you there, Doctor? 16:28:40
25 A. Uh-huh. 16:28:40

1 Q. First sentence, quote, "This talk has been based on 16:28:46

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2 the latest data available to us and a condensation 16:28:52
3 of the views expressed at the Smoking Behaviour 16:28:54
4 Conference at Chelwood 1977." 16:28:58
5 Do you know what the Smoking Behaviour 16:28:58
6 Conference at Chelwood 1977 was? 16:29:00
7 A. I haven't seen any information about that. 16:29:04
8 Q. Do you know who was in attendance at that 16:29:06
9 conference? 16:29:06
10 A. If I haven't seen any information, I couldn't know 16:29:10
11 who was there. 16:29:10
12 Q. Do you know if any publications came out of that 16:29:14
13 conference? 16:29:14
14 A. Not to my knowledge. 16:29:14
15 Q. Did you ask the plaintiffs' lawyers in this case 16:29:24
16 about that conference? 16:29:24
17 A. If I have seen this in my review, it's been a long 16:29:26
18 time ago, and I obviously have not seen it of recent 16:29:26
19 past. I don't recall asking them to pursue that 16:29:30
20 further. 16:29:30
21 Q. Did you ask plaintiffs' counsel any other questions 16:29:38
22 about the documents you reviewed? 16:29:38
23 MS. WALBURN: I am going to object to the 16:29:42
24 question and I am going to instruct the witness not 16:29:44
25 to answer a question of that vagueness dealing with 16:29:46

1 a -- dealing with the issue of conversations with 16:29:48
2 counsel. 16:29:50
3 BY MR. LOSS:
4 Q. Well, Doctor, let me show you another document. 16:29:52

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5 MR. WILSON: By the way, your 20 minutes 16:30:04
6 is half up. 16:30:04
7 MR. LOSS: Fine. I would like to mark 16:30:06
8 this document. 16:30:06
9 (Defendants' Deposition Exhibit 2472 16:30:30
10 was marked for identification.) 16:30:30
11 BY MR. LOSS:
12 Q. Doctor, all I want to know is what your handwriting 16:30:34
13 looks like. Can you tell me if that's your 16:30:36
14 handwriting on page 3 of this document? 16:30:38
15 A. Yeah, that looks like my handwriting. 16:30:54
16 Q. Now, can you turn to the page which is Bates 16:30:58
17 numbered 2991. That's a typo. The page is 2962. 16:31:08
18 A. 2991 says "What level of nicotine is addictive?" 16:31:16
19 Q. 2962. 16:31:18
20 A. Is what 2991 says on mine, sir. Is that what you 16:31:20
21 wanted? 16:31:22
22 Q. No, sir, page 2962. 16:31:24
23 A. Okay. 16:31:36
24 Q. Is that your handwriting on this page? 16:31:40
25 A. That's my handwriting, yep. 16:31:44

1 Q. Doctor, do you recall writing, quote -- well, it is 16:31:52
2 not part of the quotes. Do you recall writing that 16:31:54
3 it, quote, "would be interesting to go back and find 16:31:58
4 out exactly what FTC methods were supposed to do"? 16:32:04
5 Do you recall writing that? 16:32:06
6 A. Uh-huh. 16:32:06

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7 Q. And this is your signature -- handwriting? 16:32:10

8 A. That's my handwriting. 16:32:10

9 Q. Did you ever get around to investigating that 16:32:12

10 interesting question? 16:32:14

11 A. I don't know. This may have been one of the earlier 16:32:20

12 documents that I reviewed, and when I reviewed these 16:32:24

13 I would make some notes on some documents and not on 16:32:26

14 others. 16:32:28

15 I mean, just like the other one, "ignores 16:32:32

16 Benowitz's work," and I can't make out on mine what 16:32:36

17 it says about compensation, and I would make notes 16:32:38

18 occasionally. 16:32:38

19 I don't recall going back and doing that, 16:32:42

20 though in subsequent documents within the industry 16:32:44

21 documents there was a lot of more explanation of the 16:32:48

22 FTC method. For example, one of them talks about 16:32:52

23 the standard -- standards that they had used in 16:32:56

24 general terms. 16:32:56

25 Q. Doctor, did you examine any FTC press releases from 16:33:00

1 the time its test methodology was instituted? 16:33:02

2 A. Press releases? 16:33:04

3 Q. From the FTC. 16:33:06

4 A. I don't recall looking at any press releases. 16:33:10

5 Q. Do you know what ISC stands for? 16:33:14

6 A. I -- 16:33:16

7 Q. SC. 16:33:16

8 A. ISC, in the context of what we are talking about 16:33:22

9 here as far as nicotine or smoking or -- 16:33:26

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10 Q. Have you ever heard ISC or ISCSH? 16:33:30

11 A. I am not sure I would recognize those as initials 16:33:38

12 that I could attach to this in some way. 16:33:40

13 Q. Have you ever heard of the Independent Scientific 16:33:42

14 Committee on Smoking and Health? 16:33:44

15 A. I have heard of that, but I couldn't put it into the 16:33:50

16 context that -- of this document, if that's what you 16:33:52

17 are referring to. 16:33:54

18 Q. Do you know what the, quote, "Low Tar Programme," 16:33:58

19 P-R-O-G-R-A-M-M-E, closed quotes, means? 16:34:04

20 MS. WALBURN: I am going to object to the 16:34:06

21 form of the question. 16:34:06

22 THE WITNESS: I couldn't follow all the 16:34:10

23 initials. Could you repeat -- 16:34:12

24 BY MR. LOSS:

25 Q. Programme is spelled M-M-E at the end, it's the only 16:34:16

1 difference, Low Tar Programme. 16:34:18

2 MS. WALBURN: I am going to object to the 16:34:20

3 form in terms of vagueness. 16:34:22

4 BY MR. LOSS:

5 Q. Have you heard of that? 16:34:22

6 A. I have not heard of that, or at least if I have, I 16:34:24

7 can't recall that. I mean, it's -- 16:34:26

8 Q. Have you ever heard of any voluntary agreements 16:34:28

9 between the U.K. government and the tobacco industry 16:34:30

10 on tar reduction? 16:34:34

11 A. I remember something in some of the documents about 16:34:36

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12 agreements and how -- actually, what I remember 16:34:42
13 reading in the documents is how they -- how the -- 16:34:46
14 how B.A.T. would get around some of the agreements 16:34:48
15 and how that they would not be held to them in the 16:34:52
16 future. That's what I do recall from some of the 16:34:54
17 things that I read, but I haven't looked at the 16:34:56
18 exact agreements, but I remember hearing about 16:34:58
19 agreements between the government and B.A.T. 16:35:02
20 Q. You don't know -- you don't know how many agreements 16:35:06
21 there were, do you? 16:35:08
22 MS. WALBURN: I am going to object to the 16:35:10
23 question on the basis of form and, also, the 16:35:12
24 discovery record in this litigation. 16:35:14
25 BY MR. LOSS:

1 Q. Do you know if they have tar ceilings in the U.K.? 16:35:18
2 MS. WALBURN: Same objection. 16:35:20
3 THE WITNESS: Tar ceilings, as far as the 16:35:24
4 delivery of tar? 16:35:26
5 BY MR. LOSS:
6 Q. Yes, sir. 16:35:26
7 A. I recall seeing some things within the documents 16:35:28
8 about some standards that they had as far as tar, 16:35:30
9 but I don't recall seeing the word "tar ceilings." 16:35:36
10 When I think of the word "tar ceilings" I 16:35:38
11 think about the tar that's on the ceilings in rooms 16:35:40
12 where smokers are, actually, and that's a different 16:35:44
13 issue, obviously. 16:35:44
14 Q. Doctor, yesterday you said that some of your dozens 16:35:50

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15 of quit attempts lasted only 10 or 15 minutes. 16:35:54

16 Do you recall that? 16:35:54

17 A. I may have said that. I could characterize them as 16:36:00

18 being very short or very long. Minutes would be 16:36:06

19 some, a half hour, hour. It was -- 16:36:06

20 Q. And was that because, for you, withdrawal set in 16:36:08

21 pretty quickly? 16:36:08

22 MS. WALBURN: I am going to object to 16:36:10

23 these questions on the basis that they are 16:36:12

24 duplicative of questions that your co-counsel 16:36:16

25 covered yesterday and the territory that your 16:36:20

1 co-counsel covered yesterday, and after we extended 16:36:24

2 you the courtesy of going beyond the 12-hour mark, I 16:36:28

3 think this is entirely inappropriate. 16:36:28

4 BY MR. LOSS:

5 Q. You may answer. 16:36:30

6 A. I don't recall if it was withdrawal symptoms or if 16:36:32

7 it was cues to smoke or what would happen in those 16:36:34

8 times. 16:36:36

9 Probably the times that were very brief, 16:36:38

10 very short, would not be due to withdrawal, they 16:36:42

11 would be due to cues to smoke rather than to 16:36:46

12 withdrawal symptoms. 16:36:46

13 Q. I have a hypothetical for you. I want you to assume 16:36:50

14 that you have a group of smokers that for more than 16:36:52

15 15 years have smoked a pack a day of cigarettes, say 16:36:56

16 with an average nicotine yield of 1.0. 16:37:00

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17 Are you with me? 16:37:00

18 A. Uh-huh. 16:37:00

19 Q. I want you to further assume that you let the 16:37:04

20 smokers smoke their regular brand in the morning, 16:37:08

21 and then in the afternoon you give them 16:37:10

22 denicotinized cigarettes. 16:37:14

23 Would you expect that such smokers would 16:37:18

24 experience significant withdrawal symptoms 90 16:37:20

25 minutes after smoking a denicotinized cigarette as 16:37:24

1 compared to 90 minutes after smoking their regular 16:37:28

2 brand? 16:37:28

3 MS. WALBURN: I am going to object to the 16:37:30

4 form of the question and ask counsel if he is 16:37:32

5 referencing a particular study. 16:37:34

6 MR. LOSS: I am not at this time. 16:37:36

7 MS. WALBURN: Well, what does "at this 16:37:38

8 time" mean? 16:37:38

9 MR. LOSS: These are my hypothetical 16:37:40

10 facts. 16:37:40

11 MS. WALBURN: And they don't come from any 16:37:42

12 study? 16:37:44

13 BY MR. LOSS:

14 Q. Answer the question, sir. 16:37:46

15 A. That was the question that I had. First of all, 16:37:48

16 there are too many assumptions in that 16:37:48

17 assumptions -- set of assumptions you have given me 16:37:52

18 to kind of follow all of them, and furthermore, if 16:37:56

19 there is a study that's been done that's like that, 16:37:58

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20 given reference to what you did earlier with the 16:38:02
21 Surgeon General's Report reading me a paragraph and 16:38:04
22 then assuring me that that wasn't taken from 16:38:06
23 something and then coming back to it later on and 16:38:08
24 putting it back in my face, that's too many 16:38:12
25 assumptions for any reasonable person to try to make 16:38:14

1 some speculation about. If it's from a study, I 16:38:16
2 will look at the study, and I will try to give you 16:38:20
3 an interpretation of it. 16:38:22
4 Q. Would these smokers feel more irritable 90 minutes 16:38:28
5 after smoking a denicotinized cigarette as compared 16:38:32
6 to their own brand? 16:38:34
7 MS. WALBURN: Same objection. 16:38:48
8 MR. LOSS: He's an expert. You can answer 16:38:50
9 the hypothetical.
10 THE WITNESS: And my question was which 16:38:50
11 smokers? 16:38:54
12 BY MR. LOSS:
13 Q. The one who smoked the denicotinized cigarette as 16:38:56
14 opposed to the ones who smoked their regular brand. 16:39:00
15 Would they feel more or less irritable after 90 16:39:02
16 minutes of abstinence? 16:39:04
17 A. And these were -- and your assumptions, again, are 16:39:06
18 many, many assumptions, and so you are talking about 16:39:08
19 heavy smokers? I mean -- 16:39:08
20 Q. I will read it again, Doctor. 16:39:10
21 A. That would be fine. And if you have got the 16:39:12

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22 document that had the study that's been done -- 16:39:14
23 there's been no study that's been done like this 16:39:14
24 that you know of.
25 Q. I want you to assume that you have a group of 16:39:20

1 smokers that for more than 15 years have smoked a 16:39:22
2 pack a day of cigarettes with an average nicotine 16:39:24
3 yield of 1.0. I want you to further assume that you 16:39:28
4 let them smoke their regular brand in the morning 16:39:30
5 and then in the afternoon you give them 16:39:32
6 denicotinized cigarettes. 16:39:36
7 Would you expect that such smokers would 16:39:38
8 experience significant withdrawal symptoms 90 16:39:40
9 minutes after smoking a denicotinized cigarette as 16:39:44
10 compared to 90 minutes after smoking their regular 16:39:48
11 brand? 16:39:50
12 MS. WALBURN: Same objection. 16:39:52
13 BY MR. LOSS:
14 Q. What would you expect? 16:39:52
15 MS. WALBURN: Asked and answered. 16:39:54
16 THE WITNESS: There is no way for someone 16:39:56
17 to speculate on an answer to a question with so many 16:39:58
18 assumptions, with so many other variables that you 16:40:02
19 haven't mentioned. Even though you have talked 16:40:04
20 about smokers smoking a pack a day for X number of 16:40:08
21 years, smokers smoke differently, their nicotine and 16:40:10
22 cotinine levels would be variable. 16:40:14
23 We know one thing about smokers is when 16:40:16
24 you look at their nicotine and cotinine levels, 16:40:18

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25 there's -- within subjects there is not much 16:40:20

1 variability, but between subjects there is a large 16:40:22
2 amount of variability. 16:40:24
3 So your hypothetical question doesn't have 16:40:26
4 an answer to it because you have made a couple of 16:40:28
5 assumptions that doesn't take into account smoking 16:40:30
6 behavior to begin with. 16:40:32
7 BY MR. LOSS:
8 Q. Let me ask you this: Does inhaling tar reduce 16:40:34
9 craving? 16:40:36
10 MS. WALBURN: Objection to the form. 16:40:38
11 THE WITNESS: I have not seen any evidence 16:40:40
12 that inhaling tar by itself has to do with craving. 16:40:46
13 When we talk about craving we are talking about 16:40:48
14 craving for the nicotine, so if that's another study 16:40:52
15 that you are talking about, I would be glad to look 16:40:54
16 at that and try to interpret it for you, but I -- 16:40:58
17 that seems like an isolated question out of some 16:41:00
18 text or some study. 16:41:02
19 BY MR. LOSS:
20 Q. Does inhaling tar -- 16:41:08
21 MR. WILSON: You are now cutting into 16:41:10
22 Mr. Purdy's time. 16:41:10
23 BY MR. LOSS:
24 Q. -- reduce anxiety? 16:41:12
25 A. Tar? 16:41:12

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Q. Does inhaling tar reduce anxiety? 16:41:14

MS. WALBURN: Object to the form. 16:41:14

THE WITNESS: As far as I know, tar has 16:41:16 its main activity of causing cancer. Nicotine is a 16:41:20 psychoactive drug that's in cigarette smoke as 16:41:22 evidenced by the Surgeon General's Report there, as 16:41:26 evidenced by B.A.T. documents here, as evidenced by 16:41:30 a whole host of other evidence. 16:41:34

BY MR. LOSS:

Q. Two more questions. Does Coca-Cola have CNS 16:41:38 effects? 16:41:38

A. Coca-Cola, depending upon the form that it's in -- 16:41:42

Q. In the can. 16:41:44

MS. WALBURN: Excuse me, Counsel, but I 16:41:46 would appreciate if you wouldn't interrupt the 16:41:48 witness. 16:41:50

MR. LOSS: I apologize. 16:41:50

MS. WALBURN: And I also don't appreciate 16:41:52 your smirking and laughing. 16:41:54

MR. LOSS: I apologize, I wasn't smirking 16:41:56 or laughing. 16:41:56

MS. WALBURN: Well, I think those who are 16:41:58 in the room would say otherwise. 16:42:00

THE WITNESS: The can that you have in 16:42:00 your hand would have less psychoactivity than the 16:42:04

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1 can that's here. 16:42:06

2 BY MR. LOSS:

3 Q. Because I have a caffeine-free can, correct? 16:42:08

4 A. Correct. 16:42:08

5 Q. Does Coca-Cola have horiferal sensorial effects? 16:42:14

6 A. I have never done a study on Coca-Cola, and 16:42:18

7 furthermore, we are talking about nicotine and 16:42:20

8 nicotine dependence. I have never ever done any 16:42:22

9 work with Coca-Cola. 16:42:24

10 Q. Does Coca-Cola have carbonation in it? 16:42:26

11 A. As long as you haven't opened it up and let it sit 16:42:30

12 there all day, it's carbonated. 16:42:32

13 Q. Does carbonation trigger the trigeminal nerve? 16:42:36

14 A. The trigeminal nerve? 16:42:38

15 Q. Yes, sir. 16:42:40

16 A. There are other things within Coke that does -- 16:42:42

17 other things put into the mouth that would trigger 16:42:44

18 some of those things, but I haven't made any real 16:42:46

19 study into Coca-Cola as to how it reacts to 16:42:50

20 anything. 16:42:50

21 Q. Do you know if Coke markets a brand of Cola with no 16:42:54

22 carbonation? 16:42:56

23 A. I do not know. 16:42:58

24 MR. LOSS: I have no more questions. 16:43:00

25 MR. DARLING: Let's go off the record 16:43:10

1 while counsel are changing seats. 16:43:22

2 MS. WALBURN: Mr. Darling fails to take 16:43:26

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3 into account the speed with which Mr. Purdy moves. 16:43:28

4 MR. DARLING: I'm sorry. I didn't hear 16:43:30

5 you. 16:43:30

6 MR. PURDY: It's all right, Tom. 16:43:32

7 MR. BERENS: She was cracking a joke at 16:43:36

8 your expense. 16:43:36

9 MR. DARLING: At my expense. 16:43:38

10 MR. BERENS: But in Purdy's favor. 16:43:40

11 MR. DARLING: Oh, well, that's okay. 16:43:42

12

13 EXAMINATION 16:43:44

14 BY MR. PURDY:

15 Q. Dr. Hurt, my name is Larry Purdy, I represent the 16:43:46

16 Council for Tobacco Research and that's -- it was 16:43:50

17 also formerly known as the Tobacco Industry Research 16:43:52

18 Committee. 16:43:56

19 Do you know any physicians who, to your 16:43:56

20 knowledge, have conducted research under grants from 16:43:58

21 CTR? 16:44:00

22 A. I can't recall any offhand. I may know some that 16:44:10

23 have but I can't recall any offhand. 16:44:12

24 Q. Have you ever had any discussions with any person 16:44:14

25 who, to your knowledge, conducted research on 16:44:16

1 smoking and health or disease mechanism issues under 16:44:20

2 a grant issued by CTR? 16:44:24

3 A. I discussed a lot of things with a lot of people. I 16:44:26

4 probably have but I couldn't cite you one because 16:44:30

5 I -- the question the first -- answer to the first 16:44:32

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6 question is I probably have but I couldn't tell you 16:44:36
7 who they might be. 16:44:36
8 Q. I gather, and since being retained in this case you 16:44:44
9 can't recall sitting down and discussing any 16:44:46
10 particular CTR grant funded research with anyone; is 16:44:52
11 that a fair statement? 16:44:52
12 A. For an individual that's received CTR funding? 16:44:54
13 Q. Yes, sir. 16:44:56
14 A. I recall talking to some people that have received 16:45:02
15 grants from the Smokeless Tobacco Research Group. 16:45:08
16 Q. My question really focused on CTR. 16:45:12
17 A. I am trying to think out loud, just a second. 16:45:16
18 It's -- I don't recall that, but it could have 16:45:18
19 happened. There have been discussions about tobacco 16:45:22
20 industry support for researchers. It's been very 16:45:28
21 public in the last year or so as the Society for 16:45:34
22 Nicotine on Research and Tobacco has had a very 16:45:34
23 large discussion about this. 16:45:36
24 Q. Doctor, to your knowledge, have you ever read any 16:45:40
25 studies, you, personally, read any studies that were 16:45:44

1 funded by CTR? 16:45:46
2 A. Well, there was one we saw earlier today, I think, 16:45:48
3 that someone brought up, and there is also one by 16:45:54
4 Firth or -- it's F-I-R-T-H, it's in my bibliography, 16:46:02
5 for preparation for this. I remember that one had 16:46:04
6 funding maybe from the predecessor of the CTR. 16:46:10
7 Q. TIRC? 16:46:12

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8 A. Yes. 16:46:12
9 Q. Do you intend to express any opinions about the 16:46:16
10 quality of the research that was funded by CTR or 16:46:18
11 TIRC? 16:46:20
12 A. I am only aware of the ones that I have seen and -- 16:46:22
13 or how much research funding was provided by those 16:46:26
14 two organizations to other people, I only have 16:46:30
15 knowledge of the ones that I may have seen. I can't 16:46:34
16 speak to all of it because I don't know what all of 16:46:36
17 it was. 16:46:36
18 Q. My only question is, do you intend to express any 16:46:38
19 opinions at the time of trial about the quality of 16:46:42
20 the research which you are familiar with, the two 16:46:44
21 studies that you -- as you sit here, you are 16:46:46
22 familiar with? 16:46:50
23 Do you intend to express any opinions at 16:46:52
24 the time of trial about the quality of that 16:46:52
25 research? 16:46:52

1 A. If asked, I will give an opinion. 16:46:54
2 Q. Do you have any opinions about that today? 16:46:56
3 A. I would have to review the documents we are talking 16:46:58
4 about. 16:46:58
5 Q. Is it fair to say as you sit here today you have not 16:47:00
6 formed any opinions about the quality of the 16:47:02
7 research of the two studies that, to your knowledge, 16:47:04
8 were funded by CTR or TIRC? 16:47:08
9 A. The one that I talked -- that was earlier -- let me 16:47:10
10 see if this is the one or not. There was one that, 16:47:14

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11 when I read it the first time, I wondered about the 16:47:22
12 funding, and I wondered about some of the -- I don't 16:47:28
13 think it's the one -- I wondered about the funding 16:47:32
14 and how that might have influenced the opinions that 16:47:34
15 were being expressed. 16:47:36
16 There have been some questions about 16:47:38
17 conflict of interest that have been raised. There 16:47:42
18 was one -- I recall from my readings where there was 16:47:48
19 a specific asterisk within the introductions 16:47:56
20 asterisk that said something about this definition 16:47:58
21 was agreed to finally, and then at the bottom you 16:48:02
22 looked down and it was industry-funded research. 16:48:04
23 And so when you have those kind of 16:48:06
24 asterisks within the text of an article, the authors 16:48:08
25 obviously had to come to agreement on that, and you 16:48:12

1 wonder about the influence that industry funds have 16:48:14
2 on research. 16:48:16
3 Q. Well, I -- 16:48:16
4 A. So you asked me if I have formed an opinion. There 16:48:20
5 are some of those that I might have formed an 16:48:22
6 opinion on. 16:48:22
7 Q. Can you tell me which ones they are as you sit here 16:48:24
8 today? 16:48:24
9 A. I was just trying to describe to you, and I recall 16:48:28
10 that one, it's down in the middle of the page, and 16:48:30
11 there is an asterisk, and it's funded at the bottom, 16:48:32
12 and I can't tell you which one it is off the top of 16:48:36

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13 my head.

14 Q. And you recall reading two studies that were funded 16:48:44

15 by CTR? 16:48:44

16 A. I recall two today. I recall at least one other one 16:48:52

17 that comes to my memory. I have not -- this is the 16:48:54

18 one that we talked about today, I think. The -- the 16:49:02

19 Knapp study, Addictive Aspects of Heavy Cigarette 16:49:06

20 Smoking. 16:49:06

21 Q. You are making reference -- 16:49:08

22 A. That was the one that was referred to today. 16:49:12

23 Q. You are making reference to Exhibit 2462 dated 1962, 16:49:18

24 1963 of the American Journal of Psychiatry; is that 16:49:22

25 correct?

1 A. That's the one, right, and that's the one we talked 16:49:24

2 about earlier today, and I haven't revisited that 16:49:28

3 article to, you know, form opinions about it. I am 16:49:30

4 going to have to go back and do that. 16:49:32

5 Q. Do you have an opinion as you sit here today about 16:49:34

6 the quality of the research that's represented by 16:49:36

7 Exhibit 2462? 16:49:38

8 A. I would have to read the whole thing. I would be 16:49:40

9 glad to do that. 16:49:40

10 Q. I don't want to sit here and take the time, I just 16:49:44

11 want -- as you sit here right now, do you have any 16:49:46

12 opinion about the quality of the research that's 16:49:48

13 represented in Exhibit 2462? 16:49:50

14 MS. WALBURN: Objection, asked and 16:49:52

15 answered. 16:49:52

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16 THE WITNESS: Yeah, I would have to read 16:49:56
17 the whole document to do that. 16:49:58
18 As a general rule, when we talked 16:50:00
19 yesterday about these things, we have at our 16:50:02
20 institution a very real concern about conflict of 16:50:06
21 interest and we have a concern when it comes to 16:50:08
22 industry relations, and when there is funding coming 16:50:12
23 from industry to any researcher, they have to be 16:50:14
24 very, very careful. 16:50:16
25 I don't know how careful this was -- how 16:50:18

1 carefully this was done, so conflict of interest is 16:50:22
2 an issue that is even more important probably today 16:50:26
3 than it has been ever before, and so when something 16:50:30
4 is funded by people that might potentially benefit 16:50:34
5 from it, then that becomes a real issue. 16:50:38
6 BY MR. PURDY:
7 Q. Dr. Hurt, I want to say, as a courtesy, I have told 16:50:40
8 counsel -- represented to counsel that I was going 16:50:44
9 to attempt to limit my questions to 20 minutes. My 16:50:46
10 question was very simple and I -- and in response to 16:50:48
11 that question you took an extensive amount of time 16:50:52
12 providing me with other speeches and information 16:50:54
13 that are not responsive in any way, and I would 16:50:58
14 appreciate it, because I am going to try and get 16:51:00
15 done here in the next very few minutes, if you would 16:51:02
16 listen to my question and just answer the question 16:51:06
17 because it's just unneccesarily delaying the 16:51:06

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18 completion of this deposition. 16:51:08

19 MS. WALBURN: Well, I am going to move to 16:51:10

20 strike counsel's comments as inappropriate and 16:51:12

21 unwarranted. Your questions have been answered. 16:51:14

22 MR. PURDY: The questions -- the record is 16:51:16

23 going to speak for itself, Counsel. 16:51:18

24 BY MR. PURDY:

25 Q. Doctor, if I could take you to your report, if you 16:51:24

1 have that, please, sir. 16:51:26

2 A. All right. 16:51:26

3 Q. And I would like to direct your attention to 16:51:30

4 page 8. 16:51:32

5 A. Okay. 16:51:38

6 Q. And I will read this to you. It's under the heading 16:51:42

7 Nicotine is Addictive. The first sentence 16:51:44

8 says "Nicotine is an addictive drug and its presence 16:51:48

9 in cigarettes is the cause of continued smoking in 16:51:50

10 all but a small minority of smokers and, therefore, 16:51:52

11 increases the risks associated with smoking." 16:51:56

12 Have you -- do you have an opinion as to 16:51:58

13 what percent of smoking -- smokers do not continue 16:52:02

14 smoking because of addiction to nicotine? 16:52:06

15 MS. WALBURN: I object to the form of the 16:52:08

16 question. 16:52:08

17 THE WITNESS: It's stated here as probably 16:52:10

18 as precisely as can be stated. It's a small, small 16:52:14

19 minority. 16:52:14

20 BY MR. PURDY:

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21 Q. What's your -- do you have any opinion or -- strike 16:52:18
22 that. 16:52:22
23 Is there any information that you have 16:52:22
24 seen published which would put a percentage of 16:52:26
25 smokers into that category, into this small minority 16:52:30

1 that you have cited in your report? 16:52:30
2 A. As far as people who -- 16:52:34
3 Q. Don't continue to smoke. 16:52:34
4 A. -- continue to smoke because of nicotine? 16:52:36
5 Q. No, but the small minority who continue to smoke but 16:52:40
6 not because of nicotine. 16:52:42
7 A. Well, what it says is that its presence in 16:52:48
8 cigarettes is the cause of continued smoking in all 16:52:50
9 but a small minority of smokers, so the vast 16:52:54
10 majority of smokers continue to smoke because of 16:52:58
11 nicotine, the drug that's being delivered by 16:53:02
12 cigarettes. 16:53:02
13 Q. I understand. 16:53:02
14 A. So that's just the reverse of what this says. I 16:53:06
15 mean, that's -- 16:53:06
16 Q. That's fine. Then let's use the reverse. Have you 16:53:08
17 seen any information or evidence about what 16:53:10
18 percentage of smokers continue to smoke because of 16:53:12
19 nicotine? 16:53:12
20 A. Well, there have been various estimates as to the 16:53:16
21 nicotine addiction, if you will, in smokers. And I 16:53:22
22 think we actually cite that somewhere in the report 16:53:24

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23 but it's -- I would have to look and find it as far 16:53:28
24 as the number. It's pretty late in the day as far 16:53:32
25 as -- 16:53:32

1 Q. I appreciate that. As you sit here today, Dr. Hurt, 16:53:34
2 can you tell me, do you have an opinion as to what 16:53:36
3 percent of smokers continue to smoke because of 16:53:38
4 nicotine? 16:53:40
5 A. Well, the easiest way of saying it is only one in -- 16:53:44
6 as I say later in the report, only 1 in 20 smokers 16:53:50
7 have a one-year success rate when trying to stop on 16:53:52
8 their own. It's a very small percentage of people 16:53:56
9 who are able to stop smoking, period, and so the 16:54:00
10 reason that they continue to smoke is because of the 16:54:02
11 nicotine, if I have got -- I am having trouble with 16:54:06
12 your question, figuring out what your question is. 16:54:06
13 Q. I am trying to just figure out what you meant when 16:54:10
14 you said "a small minority." I want to know whether 16:54:14
15 or not you can put a number on that. 16:54:16
16 MS. WALBURN: Objection, asked and 16:54:18
17 answered. 16:54:18
18 THE WITNESS: I don't think I can answer 16:54:24
19 that. The vast majority of people who are smokers 16:54:28
20 smoke because of the addictive nature of the 16:54:32
21 nicotine. I don't think I can put an absolute
22 number. The vast majority of people who are
23 continued smokers smoke because of nicotine, the
24 addictive drug in cigarettes. 16:54:34
25 BY MR. PURDY:

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1 Q. And you can't be any more precise than that as to 16:54:36
2 what percentage that might be? 16:54:38
3 MS. WALBURN: Objection, asked and 16:54:40
4 answered. 16:54:40
5 THE WITNESS: It depends on the population 16:54:42
6 that you study. I mean, we are talking about the 16:54:44
7 whole population of smokers, if it's one country, 16:54:48
8 one group of smokers. It's not a simple question to 16:54:52
9 give a specific percentage to. 16:54:54
10 The vast majority of smokers continue to 16:54:58
11 smoke because of their dependence upon nicotine. 16:55:00
12 BY MR. PURDY:
13 Q. Could you pinpoint it to Minnesota? Could you give 16:55:04
14 me an opinion as to the percentage in Minnesota that 16:55:06
15 continue to smoke because of nicotine? 16:55:08
16 A. It's the vast majority of smokers continue to smoke 16:55:12
17 because of nicotine. 16:55:12
18 Q. Are you unable to put a percentage on that to any 16:55:16
19 degree -- reasonable deree of scientific or medical 16:55:18
20 certainty? 16:55:20
21 MS. WALBURN: Objection, form. 16:55:22
22 THE WITNESS: It is the vast majority of 16:55:24
23 smokers in Minnesota, Ohio, and other places that 16:55:26
24 continue to use because of nicotine. That's the 16:55:28
25 driving force behind their continued use of 16:55:32

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1 cigarettes. 16:55:32
2 BY MR. PURDY:
3 Q. Doctor, let me just -- let me just ask you this 16:55:34
4 question: Are you able to give us, to any degree of 16:55:36
5 reasonable medical or scientific certainty, the 16:55:40
6 percentage in Minnesota of smokers who continue to 16:55:44
7 smoke because of nicotine as opposed to other 16:55:46
8 reasons? 16:55:46
9 MS. WALBURN: Well, I am going to object, 16:55:50
10 asked and answered on multiple occasions. We are 16:55:52
11 late in the day, we are beyond your -- we're beyond 16:55:54
12 your 12-hour cutoff. Let's move on, Counsel. 16:55:56
13 BY MR. PURDY:
14 Q. You may answer. 16:55:58
15 A. It is the vast majority of smokers in Minnesota, 16:56:00
16 Kentucky, Iowa, wherever you want to take it, the 16:56:04
17 vast majority of smokers continue to smoke because 16:56:06
18 of nicotine, the drug that causes them to be 16:56:12
19 dependent. 16:56:12
20 Q. Doctor, do I take that -- do I fairly take it from 16:56:16
21 your answer that you are unable to give me a number, 16:56:20
22 a percentage, to a reasonable degree of scientific 16:56:24
23 or medical certainty as to the percentage of smokers 16:56:26
24 who continue to smoke here in Minnesota because of 16:56:30
25 nicotine as opposed to some other reason? 16:56:32

1 MS. WALBURN: Objection, asked and 16:56:34

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2 answered on multiple occasions, and now we are 16:56:36
3 getting into a harassment situation, Counsel. 16:56:38
4 MR. PURDY: Counsel, you know very well I 16:56:40
5 am not harassing Dr. Hurt. I am just trying to get 16:56:42
6 an answer, and he can say that he can't do that or 16:56:44
7 if he wants to say the best I can do is say it's the 16:56:46
8 vast majority, that's fine. 16:56:48
9 BY MR. PURDY:
10 Q. Is that the best you can do? 16:56:50
11 MS. WALBURN: We are here after 13 hours 16:56:52
12 of testimony. You have asked the question now at 16:56:54
13 least a half dozen times and you have gotten 16:56:56
14 responsive answers. 16:56:58
15 MR. PURDY: No, I haven't. 16:57:00
16 BY MR. PURDY:
17 Q. So go ahead, Doctor. 16:57:02
18 A. The vast majority of smokers in this state continue 16:57:04
19 to use cigarettes because of nicotine. Nicotine is 16:57:06
20 the drug that drives them to do that. 16:57:06
21 Q. Is that the best response you can give me to my 16:57:10
22 question? 16:57:10
23 MS. WALBURN: Objection. 16:57:10
24 THE WITNESS: That's my response. 16:57:18
25 BY MR. PURDY:

1 Q. In order to determine whether a particular smoker 16:57:22
2 here in Minnesota continued to smoke because of 16:57:26
3 nicotine, would you have to conduct an examination 16:57:28

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4 of that person? 16:57:40
5 MS. WALBURN: Objection, form. 16:57:40
6 THE WITNESS: Certainly have to do an 16:57:42
7 interview to discuss with them, see what their 16:57:44
8 behavior was like. 16:57:44
9 BY MR. PURDY:
10 Q. Would it be fair to say that without doing an 16:57:46
11 analysis of a particular smoker, you would be unable 16:57:46
12 to state to any degree of reasonable scientific or 16:57:50
13 medical certainty whether or not that person was 16:57:52
14 continuing to smoke due to nicotine or due to some 16:57:54
15 other reason? 16:57:56
16 MS. WALBURN: Objection, form. 16:57:58
17 THE WITNESS: Yeah, that's a long 16:57:58
18 question. Can you break it down and tell me what 16:58:00
19 all those things mean? 16:58:02
20 MR. PURDY: Just read it again, please. 16:58:02
21 (The record was read by the court
22 reporter.)
23 THE WITNESS: In the studies that we have 16:58:20
24 done, other people have done, the vast majority of 16:58:22
25 people who are continued smokers are smokers because 16:58:26

1 of the nicotine. We are talking about the whole 16:58:28
2 population of smokers and we are not talking about 16:58:30
3 necessarily individuals. 16:58:32
4 Individuals you can assess that, so we are 16:58:34
5 not talking about -- and as I said earlier, the vast 16:58:38
6 majority of people continue to smoke because of 16:58:40

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7 nicotine. That's what that book says, the Surgeon 16:58:44
8 General's Report of 1988, that's what the internal 16:58:46
9 documents that we have reviewed say, that's what 16:58:48
10 current and past scientific wisdom is, that people 16:58:52
11 continue to smoke because of nicotine. 16:58:54
12 MR. PURDY: I will move to strike as 16:58:56
13 non-responsive. 16:58:56
14 BY MR. PURDY:
15 Q. And Doctor, let me try and personalize it as simple 16:59:02
16 as I can. 16:59:02
17 If I were a smoker and I came to you, 16:59:06
18 isn't it true you would have to analyze -- you would 16:59:10
19 have to conduct an analysis of the reasons why I 16:59:14
20 continued to smoke before you knew whether it was 16:59:16
21 due to nicotine or some other reason? Isn't that a 16:59:20
22 fair statement? 16:59:20
23 MS. WALBURN: Object to the form of the 16:59:22
24 question. 16:59:22
25 THE WITNESS: If you came to me with high 16:59:28

1 blood pressure as a medical condition, based on what 16:59:32
2 I know as a physician and what's written in the 16:59:36
3 medical literature and what's written in the 16:59:38
4 scientific literature, I would assume that there is 16:59:44
5 probably a 95 percent chance that you have a central 16:59:46
6 hypertension, probably a 97 percent chance that you 16:59:50
7 have a central hypertension. 16:59:50
8 And, therefore, I would not have to do all 16:59:54

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9 kinds of things to try to figure out if there was a 16:59:58
10 secondary cause. 17:00:00
11 So, I mean, when you have a standard of 17:00:02
12 knowledge that goes across a field, you don't have 17:00:08
13 to reinvent the wheel every time you see a patient. 17:00:12
14 BY MR. PURDY:
15 Q. Without -- Doctor, without conducting an interview 17:00:14
16 of me as a smoker, how would you know whether or not 17:00:18
17 I fell within the, quote, "small minority of 17:00:20
18 smokers," closed quote, to use your term on page 8, 17:00:24
19 that may continue smoking because of reasons other 17:00:26
20 than nicotine? 17:00:26
21 A. The people we are talking about in this 17:00:30
22 particular -- the small minority would be people 17:00:34
23 that we think of as -- that are called chippers. 17:00:38
24 The word comes from the heroin addiction 17:00:42
25 nomenclature, and these are people who smoke a few 17:00:46

1 cigarettes a day or a few cigarettes a week but do 17:00:50
2 not have the hallmarks of nicotine addiction. 17:00:54
3 The vast majority of smokers do not fall 17:00:56
4 into that category, it's a very small minority, and 17:01:00
5 these people, when they decide to stop for a day or 17:01:02
6 two, they do not experience withdrawal symptoms or 17:01:04
7 any other symptoms. 17:01:06
8 So this is really a small minority of 17:01:08
9 smokers and we would call them chippers, if you 17:01:12
10 wanted to go into more detail about that. 17:01:14
11 Q. Dr. Hurt, does every pack-a-day smoker -- is every 17:01:16

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12 pack-a-day smoker, in your opinion, addicted to 17:01:20
13 nicotine? 17:01:20
14 A. Every, all, never, those are terms that I -- that I 17:01:24
15 really do not use in my practice or in science. 17:01:28
16 Those are very hazardous words, and there probably 17:01:32
17 are people who smoke those levels of cigarettes that 17:01:34
18 would not fall into the category, but the vast 17:01:38
19 majority of continued smokers are dependent upon 17:01:42
20 nicotine. 17:01:42
21 Q. But you would agree, then, based on your last 17:01:46
22 answer, that there are people who would not be 17:01:48
23 considered chippers, to use your term, who smoke a 17:01:50
24 pack of cigarettes a day. A chipper is not a pack 17:01:54
25 of cigarettes a day? 17:01:54

1 A. No, a chipper is smoking a few cigarettes a day and 17:01:58
2 that's included in this category. 17:02:00
3 MS. WALBURN: We are past the 40-minute 17:02:02
4 mark. 17:02:02
5 MR. PURDY: I just got a couple of more 17:02:06
6 questions and then I will wrap it up and I -- 17:02:08
7 BY MR. PURDY:
8 Q. Doctor, you told us that you began smoking the 17:02:10
9 sophomore year in college. I believe you said the 17:02:12
10 spring. 17:02:14
11 Was that in 1964? 17:02:16
12 MS. WALBURN: I am going to object to 17:02:16
13 these questions as being completely duplicative. 17:02:18

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14 MR. PURDY: They are not duplicative of 17:02:22
15 anything, Counsel. Let me just get it down, 17:02:24
16 Counsel, and I will get out of here. 17:02:26
17 BY MR. PURDY:
18 Q. 1964, spring of 1964? 17:02:28
19 A. We figured it up yesterday when we did this. I -- 17:02:30
20 you know, at this time of the day I have been 17:02:32
21 sitting in this chair since 8:30 this morning. You 17:02:36
22 are asking me a question that you obviously have 17:02:38
23 written down or something. You have reason to ask 17:02:42
24 it. I don't have a clue as to what it is. 17:02:44
25 Q. Okay. 17:02:44

1 A. If it looks like I might be getting annoyed with all 17:02:54
2 this, I am, so if I was a sophomore in the spring of 17:02:56
3 1964, that would be the right answer. 17:02:58
4 Q. You told us -- you told us that you smoked Marlboros 17:03:00
5 and you told us why you smoked Marlboros. Let me 17:03:04
6 ask you this question: Why did you start smoking? 17:03:06
7 A. I told you, one reason I smoked Marlboros, and 17:03:08
8 nobody bothered to ask me any more of the reasons 17:03:10
9 why I smoked Marlboros, it was kind of an off-handed 17:03:12
10 question from whoever was sitting in your chair. 17:03:14
11 Peers smoked Marlboros, but I will never 17:03:16
12 forget the advertisements on television, I will 17:03:20
13 never forget those. I will never forget the ones 17:03:22
14 about Winston, Winston tastes good like a cigarette 17:03:26
15 should (singing), call for -- all that stuff is on 17:03:28
16 television. We were -- you may not have even been a 17:03:32

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17 teenager at that time, but those of us in my age 17:03:36
18 group were bombarded on a daily basis by that stuff. 17:03:40
19 Q. I am flattered, Doctor. You and I and are 17:03:42
20 colleagues. We are contemporaries. 17:03:44
21 A. No, we are not colleagues. 17:03:46
22 Q. We are contemporaries. I'm sorry. 17:03:48
23 MR. BERENS: You are not old enough to 17:03:50
24 talk to this doctor like that. I trump you. 17:03:54
25 THE WITNESS: So the question is, I 17:03:56

1 started smoking after -- I actually started smoking 17:03:58
2 later than most people started -- would have started 17:04:00
3 smoking. 17:04:02
4 BY MR. PURDY:
5 Q. And my question wasn't why you smoked Marlboros or 17:04:06
6 Winston, my question was why you started smoking. 17:04:08
7 MS. WALBURN: Objection, asked and 17:04:10
8 answered yesterday, asked and answered today. 17:04:12
9 MR. PURDY: He didn't ask -- no one has 17:04:12
10 asked him that question, Counsel. 17:04:14
11 MS. WALBURN: Well, it has been asked and 17:04:16
12 answered.
13 THE WITNESS: Well, I have already 17:04:18
14 answered it today. There were multiple factors. 17:04:20
15 The advertisements were certainly part of that. You 17:04:22
16 couldn't avoid seeing Marlboros, and that's one 17:04:24
17 factor. 17:04:24
18 Peers smoked Marlboros, that was another 17:04:28

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19 part to this. The smoking rate amongst -- and I 17:04:30
20 think I did say this yesterday, the smoking rate 17:04:34
21 amongst males in 1965 was over 50 percent of the 17:04:38
22 population. 17:04:38
23 It was a very prevalent behavior. There 17:04:40
24 were no smoking restrictions; it was in Kentucky. I 17:04:44
25 mean, I can make you a list that goes a lot longer 17:04:46

1 than that. There was multiple factors. 17:04:50
2 But once I started, once I started, the 17:04:52
3 driving force behind it was the nicotine. There is 17:04:54
4 no question about that. 17:04:58
5 BY MR. PURDY:
6 Q. Dr. Hurt -- 17:04:58
7 A. That's why I smoked. 17:05:00
8 Q. Dr. Hurt, when you started smoking did you believe 17:05:02
9 that there was any risk to your health? 17:05:06
10 MS. WALBURN: Objection. We have gone 17:05:06
11 over this territory, we are -- 17:05:08
12 MR. PURDY: No one has asked him that 17:05:10
13 question, Counsel, and I -- I am trying to wrap this 17:05:12
14 up and if you will give me -- it will be a couple 17:05:14
15 more minutes and we are done. 17:05:16
16 MS. WALBURN: Well, listen, this territory 17:05:18
17 was covered yesterday. Because someone didn't ask 17:05:20
18 the question precisely the way you would, it's still 17:05:24
19 a violation of the case management order to play a 17:05:24
20 tag team with six lawyers now who don't even have 17:05:26
21 the stamina to stay here through the end of the 17:05:28

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22 deposition, pass the baton on, have someone else 17:05:32
23 cover the old ground. 17:05:32
24 We are past the point where we said we 17:05:34
25 would go. I would appreciate it if you would wrap 17:05:38

1 this up. 17:05:40
2 MR. PURDY: I will do so if you will just 17:05:42
3 give me the chance. 17:05:42
4 Would you read the question back, please. 17:05:44
5 (The record was read was requested and a
6 discussion was held off the record.) 17:06:38
7 BY MR. PURDY:
8 Q. Dr. Hurt, when you began smoking in your sophomore 17:06:40
9 year of college, did you believe that there were any 17:06:42
10 risks to your health associated with that? 17:06:46
11 A. I don't actually recall what I thought to that level 17:06:54
12 of detail, but I was a 19-year-old adolescent, 17:07:00
13 and 19-year-old adolescents perceive themselves as 17:07:06
14 being invulnerable to most anything. My friends 17:07:10
15 were doing this. 17:07:12
16 If I knew of the health risk or were 17:07:14
17 concerned about it, it wasn't going to apply to me 17:07:20
18 because I would -- adolescents perceive themselves 17:07:24
19 as being invulnerable to that. That's the best 17:07:28
20 answer I can give you because that was 30 years ago 17:07:32
21 or more, 33 years ago. 17:07:34
22 Q. When you quit, ultimately in 1975, why did you 17:07:38
23 quit? 17:07:38

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24 MS. WALBURN: Objection, covers territory 17:07:42
25 that was gone over in great detail yesterday. 17:07:44

1 THE WITNESS: Yeah, I -- I had stopped 17:07:44
2 smoking or tried to stop smoking dozens and dozens 17:07:48
3 of times, and that occasion was prompted by my wife 17:07:54
4 and I going to the Smokers Clinic together. 17:07:56
5 BY MR. PURDY:
6 Q. Did she also smoke? 17:07:58
7 A. Uh-huh. 17:07:58
8 Q. Does she still smoke? 17:08:00
9 A. Huh-uh. 17:08:00
10 Q. The first time you tried to quit do you recall why 17:08:04
11 you decided to quit? 17:08:06
12 MS. WALBURN: Objection. 17:08:08
13 BY MR. PURDY:
14 Q. Or tried? 17:08:10
15 MS. WALBURN: Objection, again violation 17:08:12
16 of the case management order in multiple respects 17:08:14
17 now in this continued examination. 17:08:16
18 THE WITNESS: The reality is it occurred 17:08:18
19 not too long after I started. I was ill, I went to 17:08:30
20 the physician, they did a chest X-ray, which showed 17:08:36
21 enlarged lymph nodes in my chest. The doctors there 17:08:40
22 thought this is either tuberculosis, Hodgkin's 17:08:44
23 disease or lung cancer. They didn't know what to do 17:08:50
24 about it. They referred me, oddly enough, to the 17:08:56
25 Mayo Clinic. 17:08:58

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BY MR. PURDY:

Q. Did it end up being either one -- 17:09:04

A. You asked, and I want to tell you the rest of the 17:09:04
story. No, it didn't, fortunately. But the doctor, 17:09:14
when I saw the doctor at the Mayo Clinic, I asked 17:09:20
him, what do you think about my smoking, because he 17:09:24
knew, and this lung condition that they eventually 17:09:28
diagnosed as sarciodosis, which is a different 17:09:30
story. 17:09:32

And he hedged. He said, well, it probably 17:09:36
is not going to do it any good, or something to that 17:09:40
effect. 17:09:40

And by that time my brain said, whoa, he 17:09:46
just told me I could continue to smoke. The denial 17:09:50
and the rationalization kicked in like 17:09:52
afterburners. 17:09:54

And I continued to smoke despite having a 17:09:56
pulmonary disease, and I continued to smoke right 17:10:00
through the rest of college, right through medical 17:10:04
school, knowing that. 17:10:06

So when we look at the criteria for the 17:10:08
diagnosis of nicotine addiction, I fell into the 17:10:12
criteria which has to do with continue to use 17:10:14
despite strong medical or other reasons not to use. 17:10:18

So I do remember the first time I tried to 17:10:22

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1 stop because the physician let me out of it and gave 17:10:26
2 me an endorsement to continue because he didn't say 17:10:30
3 to me, "You absolutely need to stop smoking." 17:10:34
4 But remember the time, and remember the 17:10:36
5 environment. It was in the mid 1960s when we didn't 17:10:42
6 know as much as we do today. 17:10:44
7 Q. Ultimately -- 17:10:44
8 A. But your -- but your people knew that. They knew 17:10:50
9 that. They knew about lung cancer, heart disease, 17:10:54
10 and so on. 17:10:54
11 Q. Do you have a pulmonary -- were you ultimately 17:10:56
12 diagnosed with a pulmonary disease? 17:10:58
13 A. Pulmonary sarcoidosis. 17:11:00
14 Q. Is that something that continues even today? 17:11:02
15 MS. WALBURN: Objection. 17:11:04
16 THE WITNESS: I am not sure if it's 17:11:06
17 relevant to this conversation. It doesn't go away. 17:11:10
18 BY MR. PURDY:
19 Q. Is that ultimately why -- did some doctor ultimately 17:11:12
20 convince you that you had this disease and, in fact, 17:11:16
21 your smoking, in his opinion, may exacerbate it? 17:11:18
22 A. If you have any other questions of substance I would 17:11:22
23 be glad to do that, but I -- this is my personal -- 17:11:24
24 you asked about my personal medical history. I have 17:11:28
25 given you more than any reasonable person would do. 17:11:30

1 I mean, I think -- 17:11:32
2 Q. Doctor, I appreciate what you have told me. Do I 17:11:34

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3 gather that that plays some role in the rather 17:11:38
4 strong opinions that you have expressed over the 17:11:40
5 last two days? 17:11:42
6 MR. BERENS: Mr. Purdy, at this time, for 17:11:44
7 the reasons stated by Dr. Hurt and by Ms. Walburn, 17:11:48
8 Dr. Hurt will not be answering that question. 17:11:52
9 MR. PURDY: You are instructing not to 17:11:56
10 answer? Is that what you -- that's -- I mean, I am 17:11:58
11 going to respect your instruction. 17:11:58
12 MR. BERENS: Yes. 17:12:00
13 MR. PURDY: Dr. Hurt, I think that's all I 17:12:16
14 have got. Thank you for your time. 17:12:18
15 MS. WALBURN: Before we go off the record 17:12:20
16 I would just like to put on the record the counsel 17:12:22
17 who are still in the room, Roberta Walburn on behalf 17:12:26
18 of plaintiffs. 17:12:26
19 MR. WILSON: Gary Wilson on behalf of 17:12:28
20 plaintiffs. 17:12:28
21 MR. BERENS: Mike Berens for Dr. Hurt. 17:12:30
22 MR. PETERSONS: Arvids Petersons for 17:12:34
23 Lorillard.
24 MR. RAMONETTI: John Ramonetti, litigation 17:12:34
25 assistant, Chadbourne, for B.A.T. Co. 17:12:36

1 MR. DARLING: Tom Darling, Gray, Plant, 17:12:38
2 Mooty representing R.J. Reynolds. 17:12:40
3 MR. LOSS: Greg Loss, Chadbourne & Parke, 17:12:42
4 representing B.A.T. Co. 17:12:42

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MR. GALE: Todd Gale from Kirkland & Ellis 17:12:44
for Brown & Williamson.
MR. PURDY: Larry Purdy for CTR. 17:12:50
MS. WALBURN: And can we get the time on 17:12:54
the record before we conclude? 17:12:56
VIDEOGRAPHER: This concludes the eighth 17:12:56
tape in the videotaped deposition of Dr. Hurt. The 17:12:56
time is now 5:12 p.m. 17:13:00
(Deposition adjourned and DAVID JENKINS,
having first been duly sworn, certifies that the
proceedings have been recorded accurately and that
the video accurately reflects such recording.)

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DEPOSITION CORRECTION SHEET

CASE TITLE: TOBACCO LITIGATION
DEPOSITION OF: RICHARD HURT, M.D., VOL. II
DATE TAKEN: August 20, 1997

PAGE	LINE	DESIRED CHANGES	REASON

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Deponent's Signature _____

Subscribed and sworn to before:
_____, a Notary Public, County of _____, State of _____, on _____, 1997.

Return to: Kathy L. Soper
Ray J. Lerschen & Associates
620 Plymouth Building
12 S. Sixth Street
Minneapolis, MN 55402

CONFIDENTIAL

STATE OF MINNESOTA)
) ss
COUNTY OF HENNEPIN)

BE IT KNOWN THAT I, KATHY L. SOPER, took the DEPOSITION of RICHARD HURT, VOLUME II;

THAT, I was then and there a notary public in and for the County of Hennepin, State of Minnesota;

THAT, I exercised the power of that office in taking said deposition;

THAT, by virtue thereof I was then and there authorized to administer an oath;

THAT, said witness, before testifying, was duly sworn to testify to the truth, the whole truth, and nothing but the truth, relative to this action;

THAT, said witness reserved the right to read and sign the deposition;

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10 THAT, said record is a true record of the testimony given by the witness;

11 THAT, I am neither attorney nor counsel for, nor related to or employed by any of the parties to

12 this action in which this deposition is taken and, further, that I am not a relative or employee of any

13 attorney or counsel employed by the parties hereto, or financially interested in this action.

14

WITNESS MY HAND AND SEAL this _____ day of

15 _____, 1997.

16

17

18

19

20 _____

Kathy L. Soper, CSR, RPR, Notary Public

21 Hennepin County, Minnesota

My commission expires January 31, 2000.np

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